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**135-TRC-05-002**

**SAFETY COMPLIANCE TESTING FOR FMVSS 135  
Passenger Car Brake Systems**

DaimlerChrysler Corporation  
2005 Chrysler 300, 4-Door Sedan  
NHTSA No. C50301

**TRANSPORTATION RESEARCH CENTER INC.**

10820 State Route 347  
East Liberty, Ohio 43319



Final Report Completed: October 22, 2004

**FINAL REPORT**

Prepared Under Contract No.: DTNH22-01-C-21025

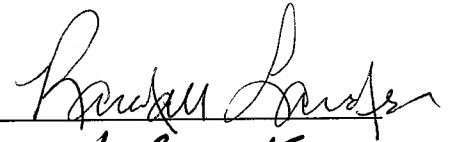
**U.S. DEPARTMENT OF TRANSPORTATION  
National Highway Traffic Safety Administration  
Enforcement**

**Office of Vehicle Safety Compliance  
400 Seventh Street, SW  
Room 6115 (NVS-220)  
Washington, DC 20590**

Prepared for the Department of Transportation, National Highway Traffic Safety Administration, under Contract No. DTNH22-01-C-21025.

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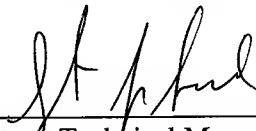
Approved By



Approval Date:

10/21/04

Final Report Acceptance By OVSC:



Contract Technical Manager, Office of  
Vehicle Safety Compliance

11/4/04

Acceptance Date

1. REPORT NUMBER: 135-TRC-05-0023333	2. GOVERNMENT ACCESSION NO.:	3. RECIPIENTS CATALOG NO.:	
4. TITLE AND SUBTITLE:  Final report of FMVSS 135 Compliance Testing of a 2005 Chrysler 300, 4-Door Sedan, NHTSA No. C50301		5. REPORT DATE:  October 22, 2004	
		6. PERFORMING ORGANIZATION CODE:  TRC 20000113/5351	
7. AUTHOR(S): Project Manager: WALTER DUDEK  Project Engineer: RANDALL A. LANDES		8. PERFORMING ORGANIZATION REPORT NO.:  TRC-DOT-135-057	
9. PERFORMING ORGANIZATION NAME AND ADDRESS:  Transportation Research Center Inc. 10820 State Route 347 East Liberty, Ohio 43319		10. WORK UNIT NUMBER:	
		11. CONTRACT OR GRANT NO.:  DTNH22-01-C-21025	
12. SPONSORING AGENCY NAME AND ADDRESS:  U.S. Department of Transportation National Highway Traffic Safety Administration Enforcement Office of Vehicle Safety Compliance (NVS-220) 400 Seventh Street, SW, Room 6115 Washington, DC 20590		13. TYPE OF REPORT AND PERIOD COVERED:  Final test report Tested: 09/03/04 to 09/29/04	
		14. SPONSORING AGENCY CODE:  NVS-220	
15. SUPPLEMENTARY NOTES:			
16. ABSTRACT:  Compliance tests were conducted on the subject 2005 Chrysler 300, 4-Door Sedan, in accordance with the specifications of the Office of Vehicle Safety Compliance Test Procedure No. TP-135-00 for the determination of FMVSS 135 compliance. Test failures identified were as follows:  None.			
17. KEY WORDS: Compliance Testing Safety Engineering FMVSS 135		18. DISTRIBUTION STATEMENT:  Copies of this report are available from: NHTSA Technical Reference Division Mail Code: NAD-40 400 Seventh Street, SW, Rm. 5108 Washington, DC 20590 Telephone No. (202) 366-4949	
19. SECURITY CLASSIF. (OF THIS REPORT): Unclassified	20. SECURITY CLASSIF. (OF THIS PAGE): Unclassified	21. NO. OF PAGES: 70	22. PRICE:

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## 1.0 INTRODUCTION

Tests were conducted on a 2005 Chrysler 300, 4-Door Sedan, manufactured by DaimlerChrysler Corporation, to determine compliance with FMVSS 135 "Passenger Car Brake Systems." All tests were conducted in accordance with the U.S. D.O.T., NHTSA Laboratory Procedure TP 135-00 and/or the corresponding Transportation Research Center Inc. (TRC Inc.) Test Procedure that was submitted to NHTSA for their approval. The Test Procedure was clearly described in the submitted document and has not been repeated in this report.

All stops were performed manually.

All tests were conducted by TRC Inc. personnel using the following TRC facilities:

### 7.5-Mile Test Track

Vehicle Maximum Speed

Burnish

Heating Snubs and Hot Performance Stops

Brake Cooling and Recovery Stops

### Skid Pad

Cold Effectiveness Stops

High Speed Effectiveness Stops

Stops with Engine Off

Failed Antilocks

Failed Variable Proportioning Valve (if applicable)

Failed Hydraulic Circuits

Brake Power Assist Unit Failures

RBS Failure

EMF (Battery) Failure

### Brake Slope

Parking Brake

Average PFC during the test period was 0.98 (Skid Pad) and 0.95 (Test Track) utilizing the ASTM E1337 w/E1336 tire method.

The test vehicle was ABS equipped. Therefore, the Wheel Lock Sequence and Adhesion Utilization Tests were not performed.

This vehicle met the requirements of FMVSS 135.

# DATA SHEET 1 - VEHICLE INFORMATION

## VEHICLE SPECS

Year: 2005	NHTSA No: C50301
Mfr: DAIMLER-CHRYSLER CORPORATION	GVWR (Kg): 2224.9
Make: CHRYSLER	GAWR Front(Kg): 1272.8
Model: 300	GAWR Rear(Kg): 1272.8
Body Style: 4-DOOR SEDAN	Wheelbase (mm): 3048.0
Mfr. Date: 5-04	Odometer: Start:130 MI. End:582 MI.
VIN: 2C3JA43R95H150151	

## BUSES ONLY

Chassis Mfg.: N/A  
 Serial No.: N/A  
 No. of Seats: N/A  
 Manufacture Date: N/A

Engine Type: GASOLINE, M.F.I. V6, DOHC, 24 VALVE, PISTON.	Tire Size: P215/65R17
Displacement: 2.7 LITER	Tire Type: INTEGRITY, 98T, STEEL BELTED RAD
Engine Hspwr: N/A	Tire Mfr.: GOODYEAR
Idle Speed(rpm): 872	GVWR Front Press.(kpa): 206.84
Transmission Type: AUTO. 4-SPD, RWD	GVWR Rear Press.(kpa): 206.84
No. of Axles: 2	

## BRAKE APPLY SYSTEM

Brake Series: Front:DISC Rear:DISC	Power Assist Unit: YES
Brake Actuation	Pwr Unit w/Accumulator: NO
(Hydr. Circuit Split): FRONT/REAR ✓	Pwr Asst./Pwr Unit w/Backup: NO
Power Unit: VACUUM	Variable Prop. System: YES
Anti-Skid unit Mfr: TYCO/CHRYSLER	Anti-Skid Device: YES
Parking Mechanism: YES	
Type of Parking Unit: AUTOMATIC TRANSMISSION WITH PARK DETENT.	
Mstr Cylinder Dia(mm): 25.40	Pedal Ratio: 3.3 : 1

## FRONT SYSTEM BRAKE COMPONENT MATERIALS AND CONSTRUCTION:

BRAKE TYPE: DISC	Material: CAST
Drum Construction: N/A	LF Drum Shoe Cage Dia.(mm): 0.00
Disc Construction: INTEGRAL CAST, VENTED	RF Drum Shoe Cage Dia.(mm): 0.00
Front Brake Dia.(mm): 317.50	LF Drum Dia. RESET(mm): 0.00
Fr Disc Thickness(mm): 28.22	RF Drum Dia. RESET(mm): 0.00
Lining Construction: Bonded	
FRONT BRAKE COMPONENT DIMENSIONS AND CODES:	
Inboard (Leading)	Outboard (Trailing)
Width(mm): 50.14	Width(mm): 50.24
Length(mm): 137.54	Length(mm): 137.57
Thickness(mm): 12.60	Thickness(mm): 12.57
Lining Code/Color: AK NS265H FF	Lining Code/Color: AK NS265H FF
Hyd. Piston Dia.(mm): 60.45	

# DATA SHEET 1 - (CONTINUED)

## REAR SYSTEM

## BRAKE COMPONENT MATERIALS AND CONSTRUCTION:

BRAKE TYPE: DISC  
Drum Construction: N/A  
Disc Construction: INTEGRAL CAST, UN- VENTED  
Lining Construction: BONDED  
Rear Brake Dia. (mm): 319.10  
Rr Disc Thickness (mm): 10.13  
Material: CAST IRON  
LR Drum Shoe Cage Dia. (mm): 0.00  
RR Drum Shoe Cage Dia. (mm): 0.00  
LR Drum Dia. RESET (mm): 0.00  
RR Drum Dia. RESET (mm): 0.00

## REAR BRAKE COMPONENT DIMENSIONS AND CODES:

Inboard (Leading)  
Width (mm): 51.77  
Length (mm): 86.46  
Thickness (mm): 11.00  
Lining Code/Color: AK NS265H FF  
Hyd Piston Dia (mm): 41.86  
Outboard (Trailing)  
Width (mm): 51.74  
Length (mm): 86.44  
Thickness (mm): 10.87  
Lining Code/Color: AK NS265H FF

## OTHER COMPONENT INFORMATION:

Friction-type Park Brake: N/A  
Non-Service Brake Type  
Parking Brake: FOOT-OPERATED

NOTE: If at any time after the test series has begun, any brake system part requires replacement or the brake system requires adjustments other than permitted in burnish and reburnish procedures, discontinue testing and notify the COTR immediately.

Technician:

*Karen Easterday*  
KAREN EASTERDAY

Date:

*10-20-07*

Quality Assurance:

*Ken Webster*  
KEN WEBSTER

## 3.0 SUMMARY OF TESTING

		Specification and Limit				TEST RESULTS (In compliance if one stop meets requirement)			
TEST	Loading Condition	Speed (km/h)	Min. Pedal Force (N)	Max. Pedal Force (N)	Stopping Distance Requirement (m)	Shortest Stop Min. Pedal Force (N)***	Shortest Stop Max. Pedal Force Newtons (Average – N)	Shortest Stop Stopping Distance (m) (Corrected)	PASS Fail
Equipment Requirements					Specified Equipment	Vehicle contains specified equipment			Pass
Vehicle Maximum Speed	LLVW	NA				189.0 km/h avg. ✓			NA
Burnish	GVWR	50				200, 80 - 0 km/h stops @ 3.0 mpsps			NA
Wheel Lockup Sequence w/o ABS	GVWR				Lockup of front wheels prior to rear	ABS Equipped			NA
Wheel Lockup Sequence w/o ABS	LLVW					ABS Equipped			NA
Adhesion Utilization w/o ABS	LLVW				Rear axle adhesion utilization curve below specified value	ABS Equipped			NA
Adhesion Utilization w/o ABS	GVWR					ABS Equipped			NA
Cold Effectiveness	GVWR	100	65	500	70	5	495.2 ✓	50.9 ✓	Pass
High Speed Effectiveness	GVWR	151.2	65	500	spd. depend. – 168.2	5	465.7 ✓	111.8 ✓	Pass
Stops with Engine Off	GVWR	100	65	500	70	5	464.8 ✓	51.2 ✓	Pass
Cold Effectiveness	LLVW	100	65	500	70	5	452.1 ✓	45.2 ✓	Pass
High Speed Effectiveness	LLVW	151.2	65	500	spd. depend. – 168.2	5	476.8 ✓	102.7 ✓	Pass
Failed Antilock	LLVW	100	65	500	70	5	271.5 ✓	49.9 ✓	Pass
Failed Proportioning Valve	LLVW	100	65	500	110	5	NA	NA	NA
Failed Hydraulic Circuit #1	LLVW	100	65	500	168	5	483.3 ✓	65.6 ✓	Pass
Failed Hydraulic Circuit #2	LLVW	100	65	500	168	5	475.6 ✓	112.7 ✓	Pass
Failed Hydraulic Circuit #1	GVWR	100	65	500	168	5	476.3 ✓	71.8 ✓	Pass
Failed Hydraulic Circuit #2	GVWR	100	65	500	168	5	493.4 ✓	115.9 ✓	Pass
Failed Antilock	GVWR	100	65	500	70	5	272.0 ✓	56.0 ✓	Pass
Failed Proportioning Valve	GVWR	100	65	500	110	5	NA	NA	NA
Regenerative Brake System (RBS) Failure	GVWR	100	65	500	168	5	NA	NA	NA
Electromotive Force (EMF) – Battery Failure	GVWR	100	65	500	70	5	NA	NA	NA
Power Brake Unit Failure	GVWR	100	65	500	168	5	494.8 ✓	147.8 ✓	Pass
Parking Brake - Uphill	GVWR	-	-	500	Hold for 5 min.?	NA	493.2 ✓	Yes-Holds ✓	Pass
Parking Brake - Downhill	GVWR	-	-	500	Hold for 5 min.?	NA	463.0 ✓	Yes-Holds ✓	Pass
Heating Snubs	GVWR	120-60	NA	NA	15 Snubs- 3.0 mpsps	5	47 Vjs. Avg.	NA	NA
Hot Performance Stop #1	GVWR	100	65	374.7 avg.	78.6	5	480.6 (279.8) ✓	50.2 ✓	Pass
Hot Performance Stop #2	GVWR	100	65	500	70	5	458.8 (318.7) ✓	48.2 ✓	Pass
Brake Cooling	GVWR	50	NA	NA	4 Stops - 3.0 mpsps	5	35 Vjs. Avg.	NA	NA
Recovery Performance Stop #1	GVWR	100	65	374.7 avg.	One of the two stops between 68.8 and 37.2 meters	5	381.2 (248.5) ✓	46.1 ✓	Pass
Recovery Performance Stop #2	GVWR	100	65	374.7 avg.		5	427.9 (299.7) ✓	50.3 ✓	
Final Inspection-Brake Integrity	Check components for detachment, fracture or lubricants.					No detachments or fractures-normal appear. & color.			Pass
Final Inspection-Reservoirs/Warning Indicators	Master cylinder or brake power reservoir shall meet the volume and label requirements of S5.4.2 and S5.4.3.					Brake system has sufficient capacity and indicators are in compliance.			Pass

\*\*\* Note: The Shortest Stop Minimum Pedal Force represents the minimum force value required to engage the data acquisition's recording mode.



# DATA SHEET 3 - VEHICLE WEIGHT

VEHICLE: 2005 CHRYSLER 300

NHTSA No. C50301 Date: 09/07/04

Tire Pressure(cold): Front (kpa) 207 Rear (kpa) 207  
Odometer: Start 130 MI. End 582 MI.  
Scale(s) Used: TRC Scales

NOTE: GVWR, LLVW and axle weights to be measured within +0% and -1%.

GVWR/GAWR INFORMATION  
(From Veh. Certification Label)

UNLOADED VEHICLE WEIGHT(UVW)

GVWR(Kg): 2225  
GAWR Front(Kg): 1273  
GAWR Rear(Kg): 1273

L Front(Kg): 442 L Rear(Kg): 390  
R Front(Kg): 454 R Rear(Kg): 401  
T Front(Kg): 896 T Rear(Kg): 791  
Total UVW(Kg): 1687 /

TARGET LIGHT LOADED WEIGHT(LLVW):

ACTUAL LIGHT LOADED WEIGHT(LLVW):

NOTE 1: LLVW = UVW+181.4Kg  
NOTE 2: Weight distributed in front passenger seat area.  
NOTE 3: Neither axle load at LLVW less than at UVW; ballast as required.

L Front(Kg): 485 L Rear(Kg): 437  
R Front(Kg): 499 R Rear(Kg): 447  
T Front(Kg): 985 T Rear(Kg): 884  
Total LLVW(Kg): 1869

L Front(Kg): 489 L Rear(Kg): 442  
R Front(Kg): 496 R Rear(Kg): 42  
T Front(Kg): 985 T Rear(Kg): 883  
Total Actual Test LLVW(Kg): 1868

Load: Driver/Observer 73(Kg) + Instru. 41(Kg) + Ballast 68(Kg) = 181(Kg)

FULLY LOADED TEST WEIGHT (ACTUAL GVWR)

NOTE 1: Vehicle loaded so axle loads proportional to GAWR shown previously.  
NOTE 2: But no axle weight to be less than at LLVW.  
NOTE 3: If weight on any axle at LLVW exceeds the axle's proportional share of the GVWR, the load required to reach GVWR is placed so that the weight on that axle remains the same as at LLVW.

L Front(Kg): 527 L Rear(Kg): 546  
R Front(Kg): 585 R Rear(Kg): 567  
T Front(Kg): 1112 T Rear(Kg): 1112  
Total Fully Loaded GVWR(Kg): 2224

Load: Driver/Observer 73(Kg) + Instru. 41(Kg) + Ballast 425(Kg)= 538(kg)

Technician: Karen Easterday

KAREN EASTERDAY

Date: 10-20-04

Quality Assurance: Ken Webster

KEN WEBSTER

# DATA SHEET 4 - EQUIPMENT REQUIREMENTS (S5)

## SERVICE BRAKE SYSTEM (S5.1)

Vehicle equipped with a service brake system acting on all wheels? YES

Wear Adjustment (S5.1.1):

Service Brakes are compensated for wear by means of a system of automatic adjustment? YES

Describe: DISC:AUTOMATIC CLEARANCE TAKE-UP.

Wear Status (S5.1.2):

Wear status of service brakes is indicated by:

(A) Acoustic or optical device? YES

Describe: METAL TAB EMITS HIGH FREQUENCY SQUEAL WHEN WORN.

(B) Visual check outside or under vehicle? YES

Describe: FRONT & REAR:LOOK THROUGH CALIPER.

## PARKING BRAKE SYSTEM (S5.2)

Vehicle equipped with a parking brake system of a friction type with solely mechanical means to retain engagement: YES

## CONTROLS (S5.3)

(A) Service brakes activated by means of a foot control? YES

(B) Parking brake control is independent of the service brake control? YES

(C) Parking brake control is hand or foot operated? YES

(D) ABS, if equipped, cannot be manually disabled? YES

DATA INDICATES COMPLIANCE: YES

COMMENTS: NONE.

Tester/Technician:

  
KAREN EASTERDAY

Date:

10-20-04

Quality Assurance:

  
KEN WEBSTER

# DATA SHEET 5 - VEHICLE MAX SPEED

VEHICLE: 2005 CHRYSLER 300

NHTSA No. C50301 Date: 09/07/04

Ambient Temperature: 67°F

Wind Velocity: 5(MPH)

Road PFC: .97

Wind Direction: 89°

Odometer: Start 149(mi) End 164(mi)

TEST WEIGHT: Total (Kg): 1868

Front (Kg): 985

Rear (Kg): 883

ESTABLISH VEHICLE MAXIMUM SPEED

VEHICLE LOAD: LLVW

IBT: N/A

GEAR: Drive

DECEL RATE: N/A

PEDAL FORCE: N/A

WHEEL LOCKUP: N/A

TEST SPEED: Maximum attainable from  
a standing start in 3.2 km.

INTERVAL: N/A

1. Ballast Vehicle to LLVW
2. Accelerate at a maximum rate from a standing start for a distance of 3.2 km on a level surface.
3. Repeat in opposite direction.
4. Record speed attained in each direction and use the average of the two runs.

	DIRECTION	MAX SPEED (km/h)		Time 0 - 100 KPH (seconds)
		Visual	Recorded	
Run No. 1	South	188.8 kph	188.8	12.67
Run No. 2	North	189.1 kph	189.1	12.69

AVERAGE = 189.0 km/h

COMMENTS: INV DATA, Section 0001, 09/10/04, 12:00:29

Tester/Technician:

  
KAREN EASTERDAY

Date: 10-20-04

Quality Assurance:

  
KEN WEBSTER

Vehicle: 2005 DAIMLER-CHRYSLER NHTSA NUMBER: C50301  
Make: CHRYSLER  
Model: 300  
Body Style: 4-DOOR SEDAN  
Front Cold Tire Pressure: 207 (Kpa)  
Rear Cold Tire Pressure: 207 (Kpa)

Transportation Research Center, Inc.  
10820 State Route 347  
East Liberty, Ohio 43319  
(937) 666-2011 www.trcpg.com

Date Tested: 09/10/04

## DATA SHEET 6 - BURNISH AT GVWR

Testing Conditions: INV DATA, Section 0002, 09/10/04, 16:25:54

Weather Conditions: 58°F Wind: 0 mph 34°

Start Odo.: 166 End Odo.: 421

### Schedule:

Initial Brake Temperature Less Than 100°C  
Initial Speed 80 km/h to zero  
200 stops with transmission in gear

### Performance Requirements:

Interval between runs: Time necessary to reduce IBT to 100 C° or  
2 km distance, whichever occurs first.  
Constant decel rate: 3.0 m/s<sup>2</sup>  
Pedal force adjusted to maintain constant decel.  
No Lock-Up allowed longer than 0.1 sec above 15 km/h  
Vehicle Must stay in lane of 3.5m

STOP	INIT	LEFT	RIGHT	LEFT	RIGHT	MAX.	AVG.	
#	SPD	FRONT	FRONT	REAR	REAR	PEDAL	PEDAL	AVG.
	(Kph)	IBT	IBT	IBT	IBT	FORCE	FORCE	DECEL
		(°C)	(°C)	(°C)	(°C)	(N)	(N)	(m/sec <sup>2</sup> )
1	79.30	101	78	77	81	65.78	43.31	2.81
10	80.03	133	100	144	167	74.90	45.30	2.86
20	79.75	130	100	156	179	59.32	35.84	2.88
30	82.18	133	101	154	180	56.08	34.62	2.82
40	79.90	133	98	152	180	51.03	32.51	2.77
50	80.11	150	107	168	192	48.91	33.85	2.78
60	79.67	130	98	138	163	55.28	36.30	2.83
70	79.95	131	102	146	176	52.92	29.32	2.86
80	80.06	127	95	146	180	55.28	27.70	2.82
90	79.28	125	93	149	177	57.02	29.60	2.88
100	79.21	123	93	145	178	54.42	33.49	2.71
110	79.62	124	94	129	156	50.69	28.41	2.76
120	79.52	121	93	142	178	55.95	29.72	2.82
130	79.08	117	88	139	174	62.66	30.43	2.87
140	79.43	118	89	144	175	60.15	33.95	2.83
150	80.49	118	88	143	177	55.68	33.15	2.82
160	80.40	120	89	146	177	60.76	35.35	3.12
170	79.70	116	88	144	174	63.97	37.89	2.78
180	80.25	117	87	141	170	58.65	50.41	2.66
190	80.73	116	85	144	166	58.83	31.31	2.78
200	80.79	114	85	146	168	50.66	34.10	2.77

COMMENTS: THIS VEHICLE ABS EQUIPPED. DATA SHEETS 7-10 NOT INCLUDED.

## BRAKE ADJUSTMENT

### Schedule:

Adjust service brakes; record procedure and amount adjusted.

Left Front: DISC DISC BRAKE NO ADJUSTMENT REQUIRED  
Right Front: DISC DISC BRAKE NO ADJUSTMENT REQUIRED  
Left Rear: DISC DISC BRAKE NO ADJUSTMENT REQUIRED.  
Right Rear: DISC DISC BRAKE NO ADJUSTMENT REQUIRED.  
DATA INDICATES COMPLIANCE: YES (X) NO ( )

Driver: KAREN EASTERDAY

Observer: NONE

Recorded Data Processed by: CHUCK JENKINS

Date: 10/15/04

Approving Laboratory Official: KEN WEBSTER

Date: 10/20/04

Vehicle: 2005 DAIMLER-CHRYSLER NHTSA NUMBER: C50301  
 Make: CHRYSLER  
 Model: 300  
 Body Style: 4-DOOR SEDAN  
 Front Cold Tire Pressure: 207 (Kpa)  
 Rear Cold Tire Pressure: 207 (Kpa)

Transportation Research Center, Inc.  
 10820 State Route 347  
 East Liberty, Ohio 43319  
 (937) 666-2011 www.trcpg.com

Date Tested: 09/13/04

## DATA SHEET 11 - COLD EFFECTIVENESS AT GVWR

Testing Conditions: INV DATA, Section 0015, 09/13/04, 09:29:18

Weather Conditions: 69°F Wind: 3 mph 147° Start Odo.: 433 End Odo.: 439

### Schedule:

Initial Brake Temperature 65 - 100 C  
 Initial Speed 100 km/h to zero  
 6 stops with transmission in neutral

### Performance Requirements:

One Stop with:  
 Stopping Distance less than 70m  
 Pedal force between 65N and 500N  
 No Lock-Up allowed longer than 0.1 sec above 15 km/h  
 Vehicle Must stay in lane of 3.5m

STOP #	INIT SPD (kph)	LEFT FRONT IBT (°C)	RIGHT FRONT IBT (°C)	LEFT REAR IBT (°C)	RIGHT REAR IBT (°C)	ACTUAL DISTANCE (meter)	CORRECTED DISTANCE (SAE 299) (meter)	MAX. PEDAL FORCE (N)	AVG. PEDAL FORCE (N)	MAX. DECEL (m/sec <sup>2</sup> )	AVG. DECEL (m/sec <sup>2</sup> )
1	99.64	79	56	67	67	53.2	53.5	469.76	367.09	9.74	6.22
2	100.34	94	74	76	75	51.2	50.9	495.16	374.69	10.97	6.79
3	99.59	91	79	71	69	51.4	51.8	587.96	364.77	11.16	6.15
4	99.64	93	83	73	72	51.5	51.9	484.33	325.53	9.90	6.06
5	99.58	92	84	68	69	51.7	52.1	494.00	358.92	10.75	6.09
6	99.68	97	89	73	72	51.2	51.6	485.98	367.77	10.71	6.24

STOP #	DRIVER VEHICLE STOP COMMENTS (Wheel Lock up - Direction of Stop - Stay in Lane)		
1	-	NOX	SOUTH YES
2	-	NOX	SOUTH YES
3	-	NOX	SOUTH YES
4	-	NOX	SOUTH YES
5	-	NOX	SOUTH YES
6	-	NOX	SOUTH YES

Corrected Distances are used to determine shortest stopping distance.

DATA INDICATES COMPLIANCE: YES (X) NO ( )

Driver: KAREN EASTERDAY Observer: NONE  
 Recorded Data Processed by: CHUCK JENKINS Date: 10/15/04  
 Approving Laboratory Official: KEN WEBSTER Date: 10/20/04

Vehicle: 2005 DAIMLER-CHRYSLER NHTSA NUMBER: C50301  
 Make: CHRYSLER  
 Model: 300  
 Body Style: 4-DOOR SEDAN  
 Front Cold Tire Pressure: 207 (Kpa)  
 Rear Cold Tire Pressure: 207 (Kpa)

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## DATA SHEET 12 - HIGH SPEED EFFECTIVENESS AT GVWR

Testing Conditions: INV DATA, Section 0020, 09/13/04, 10:50:44

Weather Conditions: 77°F Wind: 9 mph 150°

Start Odo: 442

End Odo: 451

### Schedule:

Initial Brake Temperature: 65-100°C  
 Initial Speed: 80% max km/h, not greater than 160km/h  
 6 stops with transmission in gear

### Performance Requirements:

One Stop with:  
 Stopping Distance less than: 168.2 meter  
 Pedal force between 65N and 500N  
 No Lock-Up allowed longer than 0.1 sec above 15 km/h  
 Vehicle Must stay in lane of 3.5m

STOP	INIT	LEFT	RIGHT	LEFT	RIGHT	ACTUAL	CORRECTED	MAX.	AVG.		
#	SPD	FRONT	FRONT	REAR	REAR	DISTANCE	(SAE 299)	PEDAL	PEDAL	MAX.	AVG.
	(kph)	IBT	IBT	IBT	IBT	(meter)	(meter)	FORCE	FORCE	DECEL	DECEL
		(°C)	(°C)	(°C)	(°C)			(N)	(N)	(m/sec <sup>2</sup> )	(m/sec <sup>2</sup> )
1	150.88	92	75	74	72	111.8	112.3	469.97	335.96	11.70	6.96
2	152.17	97	86	69	71	113.3	111.9	483.93	365.23	11.46	6.95
3	151.34	90	84	61	62	112.5	112.2	524.61	368.99	11.59	7.04
4	150.79	96	86	64	66	111.9	112.5	452.55	364.06	11.77	7.23
5	151.68	89	87	56	61	112.6	111.8	465.69	355.86	11.06	6.95
6	150.46	94	90	64	68	112.2	113.3	485.58	334.28	11.97	6.77

STOP DRIVER VEHICLE STOP COMMENTS  
 # (Wheel Lock up - Direction of Stop - Stay in Lane)

STOP	DRIVER VEHICLE STOP COMMENTS
#	(Wheel Lock up - Direction of Stop - Stay in Lane)
1	NOX SOUTH YES
2	NOX SOUTH YES
3	NOX SOUTH YES
4	NOX SOUTH YES
5	NOX SOUTH YES
6	NOX SOUTH YES

DATA INDICATES COMPLIANCE: YES (X) NO ( )

Driver: KAREN EASTERDAY Observer: NONE  
 Recorded Data Processed by: CHUCK JENKINS Date: 10/15/04  
 Approving Laboratory Official: KEN WEBSTER Date: 10/20/04

Vehicle: 2005 DAIMLER-CHRYSLER NHTSA NUMBER: C50301  
 Make: CHRYSLER  
 Model: 300  
 Body Style: 4-DOOR SEDAN  
 Front Cold Tire Pressure: 207 (Kpa)  
 Rear Cold Tire Pressure: 207 (Kpa)

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## DATA SHEET 13 - STOPS WITH ENGINE OFF AT GVWR

Testing Conditions: INV DATA, Section 0025, 09/13/04, 13:33:42

Weather Conditions: 79°F Wind: 8 mph 138° Start Odo.: 454 End Odo.: 463

### Schedule:

Initial Brake Temperature: 65-100°C  
 Initial Speed 100 km/h to zero  
 6 stops with transmission in neutral

### Performance Requirements:

One Stop with:  
 Stopping Distance less than 70m  
 Pedal force between 65N and 500N  
 No Lock-Up allowed longer than 0.1 sec above 15 km/h  
 Vehicle Must stay in lane of 3.5m

STOP #	INIT SPD (kph)	LEFT FRONT	RIGHT FRONT	LEFT REAR	RIGHT REAR	ACTUAL DISTANCE (meter)	CORRECTED DISTANCE (SAE 299) (meter)	MAX. PEDAL FORCE (N)	AVG. PEDAL FORCE (N)	MAX. DECEL (m/sec <sup>2</sup> )	AVG. DECEL (m/sec <sup>2</sup> )
		IBT (°C)	IBT (°C)	IBT (°C)	IBT (°C)						
1	100.12	81	59	65	66	60.2	60.0	456.44	357.91	7.95	5.72
2	100.14	98	76	78	84	51.4	51.2	464.83	344.57	10.79	6.42
3	100.75	98	83	74	78	54.4	53.6	471.81	341.93	9.96	6.50
4	100.05	98	86	67	72	52.6	52.5	474.90	381.94	11.30	6.95
5	99.42	97	87	58	62	54.8	55.4	466.51	399.54	12.15	6.35
6	100.31	94	85	56	61	52.4	52.0	491.18	364.46	10.05	6.33

STOP #	DRIVER VEHICLE STOP COMMENTS		
	(Wheel Lock-Up - Direction of Stop - Stay in Lane)		
1	-	NOX	SOUTH YES
2	-	NOX	SOUTH YES
3	-	NOX	SOUTH YES
4	-	NOX	SOUTH YES
5	-	NOX	SOUTH YES
6	-	NOX	SOUTH YES

DATA INDICATES COMPLIANCE: YES (X) NO ( )

Driver: KAREN EASTERDAY Observer: NONE  
 Recorded Data Processed by: CHUCK JENKINS Date: 10/15/04  
 Approving Laboratory Official: KEN WEBSTER Date: 10/20/04

Vehicle: 2005 DAIMLER-CHRYSLER NHTSA NUMBER: C50301  
 Make: CHRYSLER  
 Model: 300  
 Body Style: 4-DOOR SEDAN  
 Front Cold Tire Pressure: 207 (Kpa)  
 Rear Cold Tire Pressure: 207 (Kpa)

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## DATA SHEET 14 - COLD EFFECTIVENESS AT LLVW

Testing Conditions: INV DATA, Section 0030, 09/14/04, 08:38:42

Weather Conditions: 64°F Wind: 5 mph 147° Start Odo.: 474 End Odo.: 479

### Schedule:

Initial Brake Temperature: 65-100°C  
 Initial Speed 100 km/h to zero  
 6 stops with transmission in neutral

### Performance Requirements:

One Stop with:  
 Stopping Distance less than 70m  
 Pedal force between 65N and 500N  
 No Lock-Up allowed longer than 0.1 sec above 15 km/h  
 Vehicle Must stay in lane of 3.5m

STOP	INIT	LEFT	RIGHT	LEFT	RIGHT	ACTUAL	CORRECTED	MAX.	AVG.		
#	SPD	FRONT	FRONT	REAR	REAR	DISTANCE	(SAE 299)	PEDAL	PEDAL	MAX.	AVG.
	(kph)	(°C)	(°C)	(°C)	(°C)	(meter)	(meter)	(N)	(N)	(m/sec <sup>2</sup> )	(m/sec <sup>2</sup> )
1	99.43	88	59	67	70	46.1	46.6	486.14	327.99	13.14	7.15
2	99.78	96	71	73	76	45.0	45.2	452.05	324.38	14.32	7.31
3	99.94	98	76	72	75	46.8	46.8	469.85	325.45	14.00	7.35
4	99.73	94	73	68	71	46.9	47.1	510.39	351.59	14.82	6.73
5	99.35	96	77	70	72	46.6	47.2	466.55	353.46	15.77	7.41
6	99.85	99	82	73	76	47.1	47.2	477.25	353.98	15.78	7.30

STOP DRIVER VEHICLE STOP COMMENTS  
 # (Wheel Lock-Up - Direction of Stop - Stay in Lane)

STOP	DRIVER	VEHICLE	STOP COMMENTS
#	(Wheel Lock-Up	- Direction of Stop	- Stay in Lane)
1	-	NOX	SOUTH YES
2	-	NOX	SOUTH YES
3	-	NOX	SOUTH YES
4	-	NOX	SOUTH YES
5	-	NOX	SOUTH YES
6	-	NOX	SOUTH YES

DATA INDICATES COMPLIANCE: YES (X) NO ( )

Driver: KAREN EASTERDAY Observer: NONE  
 Recorded Data Processed by: CHUCK JENKINS Date: 10/15/04  
 Approving Laboratory Official: KEN WEBSTER Date: 10/20/04



Vehicle: 2005 DAIMLER-CHRYSLER NHTSA NUMBER: C50301  
 Make: CHRYSLER  
 Model: 300  
 Body Style: 4-DOOR SEDAN  
 Front Cold Tire Pressure: 207 (Kpa)  
 Rear Cold Tire Pressure: 207 (Kpa)

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## DATA SHEET 15 - HIGH SPEED EFFECTIVENESS AT LLVW

Testing Conditions: INV DATA, Section 0035, 09/14/04, 09:25:04

Weather Conditions: 69°F Wind: 7 mph 172° Start Odo.: 480 End Odo.: 489

### Schedule:

Initial Brake Temperature: 65-100°C  
 Initial Speed: 80% max km/h  
 6 stops with transmission in gear

### Performance Requirements:

One Stop with:  
 Stopping Distance less than 168.2m  
 Pedal force between 65N and 500N  
 No Lock-Up allowed longer than 0.1 sec above 15 km/h  
 Vehicle Must stay in lane of 3.5m

STOP #	INIT SPD (kph)	LEFT FRONT IBT (°C)	RIGHT FRONT IBT (°C)	LEFT REAR IBT (°C)	RIGHT REAR IBT (°C)	ACTUAL DISTANCE (meter)	CORRECTED DISTANCE (SAE 299) (meter)	MAX. PEDAL FORCE (N)	AVG. PEDAL FORCE (N)	MAX. DECEL (m/sec²)	AVG. DECEL (m/sec²)
1	150.22	94	79	73	73	103.4	104.7	468.23	353.03	15.03	7.97
2	151.65	93	79	65	69	104.7	104.0	494.09	369.60	14.49	7.68
3	150.16	97	84	64	70	102.9	104.3	467.19	364.58	14.26	7.78
4	150.43	94	82	65	71	101.6	102.7	476.76	377.73	13.98	8.02
5	149.83	101	84	76	79	103.6	105.5	475.78	353.73	14.96	7.34
6	150.46	94	87	74	78	104.4	105.4	481.86	371.65	14.38	7.85

STOP #	DRIVER VEHICLE STOP COMMENTS (Wheel Lock-Up - Direction of Stop - Stay in Lane)			
1	-	NOX	SOUTH	YES
2	-	NOX	SOUTH	YES
3	-	NOX	SOUTH	YES
4	-	NOX	SOUTH	YES
5	-	NOX	SOUTH	YES
6	-	NOX	SOUTH	YES

DATA INDICATES COMPLIANCE: YES (X) NO ( )

Driver: KAREN EASTERDAY Observer: NONE  
 Recorded Data Processed by: CHUCK JENKINS Date: 10/15/04  
 Approving Laboratory Official: KEN WEBSTER Date: 10/20/04

Vehicle: 2005 DAIMLER-CHRYSLER NHTSA NUMBER: C50301  
Make: CHRYSLER  
Model: 300  
Body Style: 4-DOOR SEDAN  
Front Cold Tire Pressure: 207 (Kpa)  
Rear Cold Tire Pressure: 207 (Kpa)

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## DATA SHEET 16 - ANTILOCK FUNCTIONAL FAILURE AT LLVW

Testing Conditions: INV DATA, Section 0040, 09/14/04, 11:02:30

Weather Conditions: 75°F Wind: 8 mph 152°

Start Odo.: 492

End Odo.: 498

### Schedule:

Initial Brake Temperature: 65-100°C  
Initial Speed 100 km/h to zero  
6 stops with transmission in neutral

### Performance Requirements:

One Stop with:  
Stopping Distance less than 85m  
Pedal force between 65N and 500N  
No Lock-Up allowed longer than 0.1 sec above 15 km/h  
Vehicle Must stay in lane of 3.5m

STOP	INIT	LEFT	RIGHT	LEFT	RIGHT	ACTUAL	CORRECTED	MAX.	AVG.		
#	SPD	FRONT	FRONT	REAR	REAR	DISTANCE	(SAE 299)	PEDAL	PEDAL	MAX.	AVG.
	(kph)	(°C)	(°C)	(°C)	(°C)	(meter)	(meter)	(N)	(N)	(m/sec²)	(m/sec²)
1	100.44	80	72	68	69	56.2	55.7	173.69	133.63	9.53	6.61
2	99.88	98	82	81	84	53.0	53.1	257.52	126.33	9.92	6.56
3	99.37	93	81	71	75	59.6	60.4	174.02	113.03	8.97	6.12
4	99.96	99	83	76	80	49.8	49.9	271.49	133.12	11.11	6.89
5	99.70	93	82	72	77	54.1	54.4	224.99	131.43	9.78	6.79
6	99.62	98	84	71	76	54.1	54.6	201.35	137.82	10.14	6.45

STOP DRIVER VEHICLE STOP COMMENTS  
# (Wheel Lock-Up - Direction of Stop - Stay in Lane)

STOP	DRIVER VEHICLE STOP COMMENTS
#	(Wheel Lock-Up - Direction of Stop - Stay in Lane)
1	NOX SOUTH YES
2	NOX SOUTH YES
3	NOX SOUTH YES
4	NOX SOUTH YES
5	NOX SOUTH YES
6	NOX SOUTH YES

How was the ABS failure induced: REMOVED 50 AMP FUSE FROM BOX UNDER HOOD ON RIGHT SIDE.

Is brake system indicator lamp activated: YES (X) NO ( )

Vehicle not equipped with variable proportioning valve. Data Sheet 17 not included.\*

\* See Appendix C.

DATA INDICATES COMPLIANCE: YES (X) NO ( )

Driver: KAREN EASTERDAY Observer: NONE  
Recorded Data Processed by: CHUCK JENKINS Date: 10/15/04  
Approving Laboratory Official: KEN WEBSTER Date: 10/20/04

Vehicle: 2005 DAIMLER-CHRYSLER  
Maks: CHRYSLER  
Model: 300  
Body Style: 4-DOOR SEDAN  
Front Cold Tire Pressure: 207 (Kpa)  
Rear Cold Tire Pressure: 207 (Kpa)

NHTSA NUMBER: C50301

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## DATA SHEET 18 - HYDRAULIC CIRCUIT FAILURE #1 AT LLVW

Testing Conditions: INV DATA, Section 0050, 09/14/04, 13:30:15

Weather Conditions: 80°F Wind: 7 mph 171° Start Odo.: 501 End Odo.: 504

Method of simulating failure: Disconnected Brake Line @ M/C Front Port

System Portion Failed: LR & RR

### Schedule:

Initial Brake Temperature: 65-100°C  
Initial Speed 100 km/h to zero  
4 stops with transmission in neutral

### Performance Requirements:

One Stop with:  
Stopping Distances less than 168m  
Pedal force between 65N and 500N  
No Lock-Up allowed longer than 0.1 sec above 15 km/h  
Vehicle Must stay in lane of 3.5m

STOP #	INIT SPD (kph)	LEFT FRONT IBT (°C)	RIGHT FRONT IBT (°C)	LEFT REAR IBT (°C)	RIGHT REAR IBT (°C)	ACTUAL DISTANCE (meter)	CORRECTED DISTANCE (SAE 299) (meter)	MAX. PEDAL FORCE (N)	AVG. PEDAL FORCE (N)	MAX. DECEL (m/sec²)	AVG. DECEL (m/sec²)
1	100.42	74	56	37	37	67.2	66.7	479.66	333.03	11.74	5.34
2	99.79	96	77	41	41	66.6	66.8	442.88	333.15	11.59	5.42
3	99.44	96	82	42	41	64.9	65.6	483.33	372.59	10.98	5.59
4	100.07	90	79	42	41	66.7	66.6	484.86	373.94	11.98	5.30

STOP # DRIVER VEHICLE STOP COMMENTS  
(Wheel Lock-Up - Direction of Stop - Stay in Lane)

STOP #	DRIVER VEHICLE STOP COMMENTS (Wheel Lock-Up - Direction of Stop - Stay in Lane)
1	NOX SOUTH YES
2	NOX SOUTH YES
3	NOX SOUTH YES
4	NOX SOUTH YES

Force Needed to Activate Brake Failure Lamp (N): N/A  
Fluid Removed (mL) to Activate Brakes Failure Lamp: 240

Is brakes system indicator lamp activated: YES (X) NO ( )

DATA INDICATES COMPLIANCE: YES (X) NO ( )

Driver: KAREN EASTERDAY Observer: NONE  
Recorded Data Processed by: CHUCK JENKINS Date: 10/15/04  
Approving Laboratory Official: KEN WEBSTER Date: 10/20/04

Vehicle: 2005 DAIMLER-CHRYSLER NHTSA NUMBER: C50301  
 Make: CHRYSLER  
 Model: 300  
 Body Style: 4-DOOR SEDAN  
 Front Cold Tire Pressure: 207 (Kpa)  
 Rear Cold Tire Pressure: 207 (Kpa)

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## DATA SHEET 19 - HYDRAULIC CIRCUIT FAILURE #2 AT LLVW

Testing Conditions: INV DATA, Section 0055, 09/14/04, 14:52:30

Weather Conditions: 80°F Wind: 19 mph 140° Start Odo.: 507 End Odo.: 511

Method of simulating failure: Disconnected Brake Line @ M/C Rear Port

System Portion Failed: LF & RF

### Schedule:

Initial Brake Temperature 65-100°C  
 Initial Speed 100 km/h to zero  
 4 stops with transmission in neutral

### Performance Requirements:

One Stop with:  
 Stopping Distance less than 168m  
 Pedal force between 65N and 500N  
 No Lock-Up allowed longer than 0.1 sec above 15 km/h  
 Vehicle Must stay in lane of 3.5m

STOP #	INIT SPD (kph)	LEFT FRONT IET (°C)	RIGHT FRONT IET (°C)	LEFT REAR IET (°C)	RIGHT REAR IET (°C)	ACTUAL DISTANCE (meter)	CORRECTED DISTANCE (SAE 299) (meter)	MAX. PEDAL FORCE (N)	AVG. PEDAL FORCE (N)	MAX. DECEL (m/sec²)	AVG. DECEL (m/sec²)
1	100.39	47	46	79	80	113.5	112.7	475.59	395.25	7.23	3.23
2	99.19	43	42	76	79	116.4	118.3	467.28	414.02	7.55	3.19
3	98.91	43	42	86	92	112.7	115.2	469.79	425.82	7.22	3.28
4	100.36	42	42	86	92	114.9	114.1	471.90	408.43	7.37	3.25

STOP #	DRIVER VEHICLE STOP COMMENTS (Wheel Lock-Up - Direction of Stop - Stay in Lane)			
1	-	NOX	SOUTH	YES
2	-	NOX	SOUTH	YES
3	-	NOX	SOUTH	YES
4	-	NOX	SOUTH	YES

Force Needed to Activate Brake Failure Lamp (N): N/A  
 Fluid Removed (mL) to Activate Brake Failure Lamp: 240

Is brake system indicator lamp activated: YES (X) NO ( )

DATA INDICATES COMPLIANCE: YES (X) NO ( )

Driver: KAREN EASTERDAY Observer: NONE  
 Recorded Data Processed by: CHUCK JENKINS Date: 10/15/04  
 Approving Laboratory Official: KEN WEBSTER Date: 10/20/04

Vehicle: 2005 DAIMLER-CHRYSLER NHTSA NUMBER: C50301  
 Make: CHRYSLER  
 Model: 300  
 Body Style: 4-DOOR SEDAN  
 Front Cold Tire Pressure: 207 (Kpa)  
 Rear Cold Tire Pressure: 207 (Kpa)

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## DATA SHEET 20 - HYDRAULIC CIRCUIT FAILURE #1 AT GVWR

Testing Conditions: INV DATA, Section 0060, 09/15/04, 10:37:27

Weather Conditions: 71°F Wind: 13 mph 150° Start Odo.: 527 End Odo.: 531

Method of simulating failure: Disconnected Brake Line @ M/C Front Port

System Portion Failed: LR & RR

### Schedule:

Initial Brake Temperature 65-100°C  
 Initial Speed 100 km/h to zero  
 6 stops with transmission in neutral

### Performance Requirements:

One Stop with:  
 Stopping Distance less than 168m  
 Pedal force between 65N and 500N  
 No Lock-Up allowed longer than 0.1 sec above 15 km/h  
 Vehicle Must stay in lane of 3.5m

STOP #	INIT SPD (kph)	LEFT FRONT IET (°C)	RIGHT FRONT IET (°C)	LEFT REAR IET (°C)	RIGHT REAR IET (°C)	ACTUAL DISTANCE (meter)	CORRECTED DISTANCE (SAB 299) (meter)	MAX. PEDAL FORCE (N)	AVG. PEDAL FORCE (N)	MAX. DECEL (m/sec²)	AVG. DECEL (m/sec²)
1	100.42	85	59	50	51	74.4	73.8	472.63	348.81	8.55	4.54
2	100.09	80	71	40	41	72.9	72.8	478.41	356.21	8.42	4.56
3	100.74	97	88	38	38	72.8	71.8	476.33	360.88	8.62	4.52
4	100.02	94	91	34	35	73.4	73.4	490.18	400.57	7.96	4.45

STOP # DRIVER VEHICLE STOP COMMENTS  
 (Wheel Lock-Up - Direction of Stop - Stay in Lane)

STOP #	DRIVER VEHICLE STOP COMMENTS
1	NOX SOUTH YES
2	NOX SOUTH YES
3	NOX SOUTH YES
4	NOX SOUTH YES

Is brake system indicator lamp activated: YES (X) NO ( )

DATA INDICATES COMPLIANCE: YES (X) NO ( )

Driver: KAREN EASTERDAY Observer: NONE  
 Recorded Data Processed by: CHUCK JENKINS Date: 10/15/04  
 Approving Laboratory Official: KEN WEBSTER Date: 10/20/04

Vehicle: 2005 DAIMLER-CHRYSLER NHTSA NUMBER: C50301  
 Make: CHRYSLER  
 Model: 300  
 Body Style: 4-DOOR SEDAN  
 Front Cold Tire Pressure: 207 (Kpa)  
 Rear Cold Tire Pressure: 207 (Kpa)

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## DATA SHEET 21 - HYDRAULIC CIRCUIT FAILURE #2 AT GVWR

Testing Conditions: INV DATA, Section 0065, 09/15/04, 08:48:01

Weather Conditions: 63°F Wind: 10 mph 157° Start Odo.: 519 End Odo.: 523

Method of simulating failure: Dieconnected Brake Line @ M/C Rear Port

System Portion Failed: LF & RF

### Schedule:

Initial Brake Temperature 65-100°C  
 Initial Speed 100 km/h to zero  
 4 stops with transmission in neutral

### Performance Requirements:

One Stop with:  
 Stopping Distance less than 168m  
 Pedal force between 65N and 500N  
 No Lock-Up allowed longer than 0.1 sec above 15 km/h  
 Vehicle Must stay in lane of 3.5m

STOP #	INIT SPD (kph)	LEFT FRONT IET (°C)	RIGHT FRONT IET (°C)	LEFT REAR IET (°C)	RIGHT REAR IET (°C)	ACTUAL DISTANCE (meter)	CORRECTED DISTANCE (SAB 299) (meter)	MAX. PEDAL FORCE (N)	AVG. PEDAL FORCE (N)	MAX. DECEL (m/sec²)	AVG. DECEL (m/sec²)
1	99.78	31	27	92	95	119.2	119.7	488.31	414.75	5.01	3.00
2	100.23	28	32	85	82	117.7	117.1	498.04	456.24	6.54	3.06
3	99.21	31	33	86	85	120.9	122.8	491.58	433.65	5.23	2.90
4	100.46	31	35	94	93	117.0	115.9	493.39	441.93	5.90	3.14

STOP #	DRIVER VEHICLE STOP COMMENTS (Wheel Lock-Up - Direction of Stop - Stay in Lane)			
1	-	NOX	SOUTH	YES
2	-	NOX	SOUTH	YES
3	-	NOX	SOUTH	YES
4	-	NOX	SOUTH	YES

Is brake system indicator lamp activated: YES (X) NO ( )

DATA INDICATES COMPLIANCE: YES (X) NO ( )

Driver: KAREN EASTERDAY Observer: NONE  
 Recorded Data Processed by: CHUCK JENKINS Date: 10/15/04  
 Approving Laboratory Official: KEN WEBSTER Date: 10/20/04

Vehicle: 2005 DAIMLER-CHRYSLER NHTSA NUMBER: C50301  
Make: CHRYSLER  
Model: 300  
Body Style: 4-DOOR SEDAN  
Front Cold Tire Pressure: 207 (Kpa)  
Rear Cold Tire Pressure: 207 (Kpa)

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## DATA SHEET 22 - ANTILOCK FUNCTIONAL FAILURE AT GVWR

Testing Conditions: INV DATA, Section 0070, 09/15/04, 13:03:42

Weather Conditions: 79°F Wind: 20 mph 205° Start Odo.: 533 End Odo.: 539

### Schedule:

Initial Brake Temperature 65-100°C  
Initial Speed 100 km/h to zero  
6 stops with transmission in neutral

### Performance Requirements:

One Stop with:  
Stopping Distance less than 85m  
Pedal force between 65N and 500N  
No Lock-Up allowed longer than 0.1 sec above 15 km/h  
Vehicle Must stay in lane of 3.5m

STOP	INIT	LEFT	RIGHT	LEFT	RIGHT	ACTUAL	CORRECTED	MAX.	AVG.		
#	SPD	FRONT	FRONT	REAR	REAR	DISTANCE	DISTANCE	PEDAL	PEDAL	MAX.	AVG.
	(kph)	IBT	IBT	IBT	IBT	(m/sec)	(m/sec)	FORCE	FORCE	DECEL	DECEL
		(°C)	(°C)	(°C)	(°C)			(N)	(N)	(m/sec <sup>2</sup> )	(m/sec <sup>2</sup> )
1	100.49	84	58	61	64	62.3	61.6	185.49	143.30	8.34	5.71
2	99.17	94	78	68	72	55.7	56.6	311.14	148.55	9.57	6.22
3	98.39	88	74	64	69	62.9	65.0	298.45	149.87	9.13	5.68
4	100.45	96	86	73	78	59.0	58.5	197.56	152.96	8.47	5.95
5	100.08	86	84	72	76	56.1	56.0	272.04	145.89	8.91	6.36
6	99.74	87	83	68	72	59.2	59.5	224.71	130.06	9.01	6.16

STOP DRIVER VEHICLE STOP COMMENTS  
# (Wheel Lock-Up - Direction of Stop - Stay in Lane)

STOP	DRIVER VEHICLE STOP COMMENTS
#	(Wheel Lock-Up - Direction of Stop - Stay in Lane)
1	NOX SOUTH YES
2	NOX SOUTH YES
3	NOX SOUTH YES
4	NOX SOUTH YES
5	NOX SOUTH YES
6	NOX SOUTH YES

How was the ABS failure induced: REMOVED 50 AMP FUSE FROM BOX UNDER HOOD ON RIGHT SIDE.

Is brake system indicator lamp activated: YES (X) NO ( )

Vehicle not equipped with variable proportioning valve. Data Sheet 23 not included.\*

\* See Appendix C.

DATA INDICATES COMPLIANCE: YES (X) NO ( )

Driver: KAREN EASTERDAY Observer: NONE  
Recorded Data Processed by: CHUCK JENKINS Date: 10/15/04  
Approving Laboratory Official: KEN WEBSTER Date: 10/20/04

Vehicle: 2005 DAIMLER-CHRYSLER NHTSA NUMBER: C50301  
 Make: CHRYSLER  
 Model: 300  
 Body Style: 4-DOOR SEDAN  
 Front Cold Tire Pressure: 207 (Kpa)  
 Rear Cold Tire Pressure: 207 (Kpa)

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## DATA SHEET 24 - BRAKE POWER UNIT OR PWR ASSIST UNIT IN/OP AT GVWR

Testing Conditions: INV DATA, Section 0080, 09/15/04, 14:01:34

Weather Conditions: 80°F Wind: 12 mph 150° Start Odo.: 539 End Odo.: 545

Failures Simulation: Disconnect primary sources of power.

Method of rendering inoperative: Removed Engine Vacuum Hose at Booster

### Schedule:

Initial Brake Temperature 65-100°C  
 Initial Speed 100 km/h to zero  
 6 stops with transmission in neutral

### Performance Requirements:

One Stop with:  
 Stopping Distance less than 168m  
 Pedal force between 65N and 500N  
 No Lock-Up allowed longer than 0.1 sec above 15 km/h  
 Vehicle Must stay in lane of 3.5m

STOP	INIT	LEFT	RIGHT	LEFT	RIGHT	ACTUAL	CORRECTED	MAX.	AVG.	MAX.	AVG.
#	SPD	FRONT	FRONT	REAR	REAR	DISTANCE	(SAE 299)	PEDAL	PEDAL	DECEL	DECEL
	(kph)	(°C)	(°C)	(°C)	(°C)	(meter)	(meter)	(N)	(N)	(m/sec <sup>2</sup> )	(m/sec <sup>2</sup> )
1	99.97	74	74	59	63	155.2	155.2	499.26	480.61	3.34	2.46
2	100.79	96	87	76	82	147.0	144.7	512.89	468.96	3.67	2.59
3	99.95	80	79	71	75	153.4	153.5	498.86	465.99	3.65	2.56
4	99.88	92	81	74	79	144.4	144.7	501.00	475.26	3.58	2.62
5	99.69	88	79	71	76	146.9	147.8	494.83	466.94	3.69	2.60
6	100.35	93	84	78	83	140.0	139.1	502.58	476.05	3.51	2.71

STOP DRIVER VEHICLE STOP COMMENTS  
 # (Wheel Lock-Up - Direction of Stop - Stay in Lane)

STOP	1	2	3	4	5	6
#	-	-	-	-	-	-
WHEEL LOCK-UP	NOX	NOX	NOX	NOX	NOX	NOX
DIRECTION OF STOP	SOUTH	SOUTH	SOUTH	SOUTH	SOUTH	SOUTH
STAY IN LANE	YES	YES	YES	YES	YES	YES

Is the brake system indicator lamp activated: YES ( ) NO (X)

DATA INDICATES COMPLIANCE: YES (X) NO ( )

Driver: KAREN EASTERDAY Observer: NONE  
 Records Data Processed by: CHUCK JENKINS Date: 10/15/04  
 Approving Laboratory Official: KEN WEBSTER Date: 10/20/04



Vehicle: 2005 DAIMLER-CHRYSLER NHTSA NUMBER: C50301  
Make: CHRYSLER  
Model: 300  
Body Style: 4-DOOR SEDAN  
Front Cold Tire Pressure: 207 (Kpa)  
Rear Cold Tire Pressure: 207 (Kpa)

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Date Tested: 09/16/04

## DATA SHEET 25 - PARKING BRAKE AT GVWR

Testing Conditions: INV DATA, Section 0085, 09/16/04, 09:16:39  
Parking brake: AUTOMATIC TR Non-service type: FOOT-OPERATED

Service type: N/A

Weather Conditions: 72°F Wind: 11 mph 209° Start Odo.: 555 End Odo.: 555

Test Weight: Total:2224kg Front:1112kg Rear:1112kg

### Schedule:

Initial Brake Temperature <100°C or (Ambient temp.  
if non-service brake type materials)  
Loaded to GVWR with transmission in neutral  
Drive onto 20% slope in forward and reverse directions.

### Performance Requirements:

Up to Three Applies in each direction:  
Parking brake must hold the vehicle stationary  
in both directions for 5 minutes each.  
Pedal force: Hand control: <400 N  
Foot control: <500 N

NOTE: For vehicles with parking brake systems not utilizing the  
service brake friction elements, the friction elements of such systems  
are to be burnished prior to parking brake tests according to the  
manufacturer's published recommendation as furnished to the purchaser.  
If no recommendations are furnished, test the system in an unburnished  
condition. If recommendations are furnished, record method used.

APPLY #	MAX SERVICE FORCE (N)	MAX P-BRAKE FORCE (N)	LEFT REAR IBT (°C)	RIGHT REAR IBT (°C)	AVG REAR IBT (°C)	DRIVER VEHICLE STOP COMMENTS (Direction of Stop (Up/Down) - Brake holds/fails)			
1	87.3	493.2	66	69	67.5	-	0 REAPPLY	UPHILL	HOLDS 20%
2	89.4	463.0	52	53	52.2	-	0 REAPPLY	DOWNHILL	HOLDS 20%

Is brake system indicator lamp activated: YES (X) NO ( )

DATA INDICATES COMPLIANCE: YES (X) NO ( )

Driver: KAREN EASTERDAY Observer: NONE  
Recorded Data Processed by: CHUCK JENKINS Date: 10/15/04  
Approving Laboratory Official: KEN WEBSTER Date: 10/20/04

Vehicle: 2005 DAIMLER-CHRYSLER NHTSA NUMBER: C50301

Make: CHRYSLER

Model: 300

Body Style: 4-DOOR SEDAN

Front Cold Tire Pressure: 207 (Kpa)

Rear Cold Tire Pressure: 207 (Kpa)

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Date Tested: 09/16/04

## DATA SHEET 26 - HEATING SNUBS AT GVWR

Testing Conditions: INV DATA, Section 0090, 09/16/04, 10:31:37

### Schedule:

Conduct 15 snubs from 120 Km/h or 80% Vmax, whichever is slower, to 1/2 of initial speed.

Attain required decel in 1 second and maintain that decel.

Interval between snubs is 45 seconds and WOT to initial speed.

### Performance Requirements:

Initial IBT for first snub is 55-65°C

Maintain 3.0 m/s/s deceleration

Vehicle Must stay in lane of 3.5m

SNUB	AVG. DECEL	Time Between Snubs	AVG. PEDAL FORCE	LEFT FRONT IBT	RIGHT FRONT IBT	LEFT REAR IBT	RIGHT REAR IBT	INIT SPD
#	(m/sec <sup>2</sup> )	(second)	(N)	(°C)	(°C)	(°C)	(°C)	(kph)
1	2.90	--NA--	47.12	59	50	44	46	120.19
2	2.65	46	55.71	99	64	79	82	119.80
3	2.65	46	38.31	138	81	112	118	119.79
4	2.91	44	57.76	168	100	143	147	120.55
5	3.06	47	43.51	194	121	172	178	119.96
6	2.82	47	50.45	212	134	201	205	119.33
7	2.65	41	49.96	233	149	223	231	121.30
8	2.81	46	47.70	245	162	244	251	120.30
9	2.63	44	40.15	258	172	263	271	120.36
10	2.72	45	48.53	272	180	277	287	119.37
11	2.90	45	43.18	281	188	288	300	119.51
12	2.80	46	43.30	291	197	301	312	121.31
13	3.19	43	48.71	299	205	311	321	120.71
14	2.84	46	53.36	306	214	322	327	121.06
15	3.07	45	36.72	311	219	329	333	120.78

STOP DRIVER VEHICLE SNUB COMMENTS  
# (Wheel Lock-Up - Direction of Stop - Stay in Lane)

STOP #	WHEEL LOCK-UP	DIRECTION OF STOP	STAY IN LANE
1	-	NOX	NORTH
2	-	NOX	EAST
3	-	NOX	SOUTH
4	-	NOX	SOUTH
5	-	NOX	SOUTH
6	-	NOX	WEST
7	-	NOX	WEST
8	-	NOX	NORTH
9	-	NOX	NORTH
10	-	NOX	NORTH
11	-	NOX	EAST
12	-	NOX	EAST
13	-	NOX	SOUTH
14	-	NOX	SOUTH
15	-	NOX	SOUTH

DATA INDICATES COMPLIANCE: YES (X) NO ( )

Driver: KAREN EASTERDAY

Observer: NONE

Recorded Data Processed by: CHUCK JENKINS

Date: 10/15/04

Approving Laboratory Official: KEN WEBSTER

Date: 10/20/04

Vehicle: 2005 DAIMLER-CHRYSLER NHTSA NUMBER: C50301  
 Make: CHRYSLER  
 Model: 300  
 Body Style: 4-DOOR SEDAN  
 Front Cold Tire Pressure: 207 (Kpa)  
 Rear Cold Tire Pressure: 207 (Kpa)

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Date Tested: 09/16/04

## DATA SHEET 27 - HOT PERFORMANCE AT GVWR

Testing Conditions: INV DATA, Section 0095, 09/16/04, 10:42:41

### Schedule:

Make 2 stops from 100 kph  
 Pedal Force: 1st stop is done with an average force less than the average recorded in the shortest GVWR Cold Effectiveness stop.  
 2nd stop is done with a force less than 500 N.  
 No Lock-Up allowed longer than 0.1 sec above 15 km/h.  
Distance Requirements are based on the following:  
 shortest stop in Data Sheet 11 is: 2  
 Initial speed of stop: 100.34 (kph)  
 Actual distance of stop: 51.2 (meter)  
 Average pedal force: 374.7 (N)

### Performance Requirements:

Stop Number 1 must be less than: 78.6 (meter)  
 In addition the stopping distance for at least one of the of the two hot stops must be less than: 89 (meter)

STOP #	INIT SPD (kph)	LEFT FRONT IET (°C)	RIGHT FRONT IET (°C)	LEFT REAR IET (°C)	RIGHT REAR IET (°C)	ACTUAL DISTANCE (meter)	CORRECTED DISTANCE (SAE 299) (meter)	MAX. PEDAL FORCE (N)	AVG. PEDAL FORCE (N)	MAX. DECEL (m/sec <sup>2</sup> )	AVG. DECEL (m/sec <sup>2</sup> )
1	100.16	324	227	339	343	50.4	50.2	480.56	279.78	13.15	6.91
2	100.15	332	238	344	349	48.4	48.2	458.79	318.65	13.82	6.60

STOP #	DRIVER VEHICLE STOP COMMENTS (Wheel Lock-Up - Direction of Stop - Stay in Lane)			
1	-	NOX	WEST	YES
2	-	NOX	WEST	YES

DATA INDICATES COMPLIANCE: YES (X) NO ( )

Driver: KAREN EASTERDAY Observer: NONE  
 Recorded Data Processed by: CHUCK JENKINS Date: 10/15/04  
 Approving Laboratory Official: KEN WEBSTER Date: 10/20/04

Vehicle: 2005 DAIMLER-CHRYSLER NHTSA NUMBER: C50301  
 Make: CHRYSLER  
 Model: 300  
 Body Style: 4-DOOR SEDAN  
 Front Cold Tire Pressure: 207 (Kpa)  
 Rear Cold Tire Pressure: 207 (Kpa)

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Date Tested: 09/16/04

## DATA SHEET 28 - BRAKE COOLING STOPS AT GVWR

Testing Conditions: INV DATA, Section 0100, 09/16/04, 10:45:42

### Schedule:

Initial Brake Temperature:  
 Achieved on completing Hot Performance  
 Initial Speed 50 km/h to zero  
 4 stops with transmission in gear

### Performance Requirements:

Constant Decel rate: 3.0 m/s/s  
 Pedal force adjusted as necessary  
 No Lock-Up allowed longer than 0.1 sec above 15 km/h  
 Vehicle Must stay in lane of 3.5m

STOP #	INIT SPD (kph)	AVG. DECEL (m/sec <sup>2</sup> )	AVG. PEDAL FORCE (N)	LEFT FRONT IBT (°C)	RIGHT FRONT IBT (°C)	LEFT REAR IBT (°C)	RIGHT REAR IBT (°C)
1	50.17	2.88	38.50	294	240	311	314
2	49.52	2.53	37.12	257	216	274	279
3	49.97	2.69	33.15	226	188	242	251
4	50.74	2.89	32.63	202	166	220	231

STOP #	DRIVER VEHICLE STOP COMMENTS (Wheel Lock up - Direction of Stop - Stay in Lane)		
1	-	NOX	NORTH YES
2	-	NOX	NORTH YES
3	-	NOX	NORTH YES
4	-	NOX	EAST YES

DATA INDICATES COMPLIANCE: YES (X) NO ( )

Driver: KAREN EASTERDAY Observer: NONE  
 Recorded Data Processed by: CHUCK JENKINS Date: 10/15/04  
 Approving Laboratory Official: KEN WEBSTER Date: 10/20/04

Vehicle: 2005 DAIMLER-CHRYSLER NHTSA NUMBER: C50301  
 Make: CHRYSLER  
 Model: 300  
 Body Style: 4-DOOR SEDAN  
 Front Cold Tire Pressure: 207 (Kpa)  
 Rear Cold Tire Pressure: 207 (Kpa)

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Date Tested: 09/16/04

## DATA SHEET 29 - RECOVERY PERFORMANCE AT GVWR

Testing Conditions: INV DATA, Section 0105, 09/16/04, 10:52:48

Weather Conditions: 75°F Wind: 16 mph 232° Start Odo.: 557 End Odo.: 575

### Schedule:

Make 2 stops from 100 kph  
 Pedal Force: Both stops are performed with an average force less than the average recorded in the shortest GVWR Cold Effectiveness stop.

### Performance Requirements:

One of the two stops must be within the following limits:  
 Upper limit of corrected stopping distance: 68.8 (meter)  
 Lower limit of corrected stopping distance: 37.5 (meter)

No Lock-Up allowed longer than 0.1 sec above 15 km/h.

### Distance Requirements are based on the following:

Shortest stop Data Sheet 11 is: Stop 2  
 Initial speed of stop: 100.34 (kph)  
 Actual distance of stop: 51.2 (meter)  
 Average pedal force: 374.7 (N)

STOP #	INIT SPD (kph)	LEFT FRONT IBT (°C)	RIGHT FRONT IBT (°C)	LEFT REAR IBT (°C)	RIGHT REAR IBT (°C)	ACTUAL DISTANCE (meter)	CORRECTED DISTANCE (SAE 299) (meter)	MAX. PEDAL FORCE (N)	AVG. PEDAL FORCE (N)	MAX. DECEL (m/sec <sup>2</sup> )	AVG. DECEL (m/sec <sup>2</sup> )
1	100.54	190	156	213	223	46.6	46.1	381.15	248.51	12.94	7.05
2	99.12	204	161	226	236	49.5	50.3	427.94	299.69	14.84	6.92

STOP #	DRIVER VEHICLE STOP COMMENTS (Wheel Lock-Up - Direction of Stop - Stay in Lane)			
1	-	NOX	SOUTH	YES
2	-	NOX	SOUTH	YES

DATA INDICATES COMPLIANCE: YES (X) NO ( )

Driver: KAREN EASTERDAY Observer: NONE  
 Recorded Data Processed by: CHUCK JENKINS Date: 10/15/04  
 Approving Laboratory Official: KEN WEBSTER Date: 10/20/04

**DATA SHEET 30 (Part 1 of 5)**  
**6.0 Test Completion Inspection (7.17)**

VEHICLE: 2005 Chrysler 300    NHTSA NO.: C50301    DATE: 09/28/04

**System Integrity (S5.6)**

Each vehicle shall meet the complete performance requirements of this standard without:

(a) Detachment or fracture of any component of the braking system such as brake springs and brake shoes or disc pad facings, other than minor cracks, that do not impair attachment of the friction facings. All mechanical components of the braking system shall be intact and functional. Friction facing tearout (complete detachment of lining) shall not exceed 10 percent of the lining on any single frictional element.

(b) Any visible brake fluid or lubricant on the friction surface of the brake or leakage at the master cylinder or brake power unit reservoir cover, seal, and filler openings.

<b>Friction Material Condition: Primary/Inner</b>		<b>Friction Material Condition: Secondary/Outer</b>	
LF	Normal Appearance & Color	LF	Normal Appearance & Color
RF	Normal Appearance & Color	RF	Normal Appearance & Color
LR	Normal Appearance & Color	LR	Normal Appearance & Color
RR	Normal Appearance & Color	RR	Normal Appearance & Color
<b>Drum (or Rotor) Condition:</b>		<b>Brake Fluid/Lubricant Inside Brakes:</b>	
LF	Normal Appearance & Color	LR	Minor weeping – piston seal.
RF	Normal Appearance & Color	RF	None
LR	Normal Appearance & Color	LR	None
RR	Normal Appearance & Color	RR	None
<b>Hydraulic Component Condition:</b>		<b>Mechanical Component Condition:</b>	
LF	Good	Brk/Pedal	Good
RF	Good	Power Brk	Good
LR	Good	Stop/Lamp	Good
RR	Good	Linkage	Good
M/Cyl	Good	Other	NA

COMPLIANCE:    Yes X            No     

Comments: None.

Technician: K. Easterday

**DATA SHEET 30 (Part 2 of 5)**  
**TEST COMPLETION INSPECTION (S7.17)**

VEHICLE: 2005 Chrysler 300;  
 MASTER CYLINDER RESERVOIR:

NHTSA NO.: C50301;

GVWR: 2225 kg

DATE	09/20/04	Requirements	Pass	Fail
<b>Reservoir Compartments (S5.4.1)</b>				
(1) Does master cylinder have a reservoir compartment for each brake subsystem?	<u>Yes</u>	Master cylinder shall have a reservoir compartment for each subsystem.	X	
	No			
(2) Does loss of fluid in one compartment result in complete loss from another compartment?	Yes	Loss of fluid from one compartment shall not cause complete loss from another compartment.	X	
	<u>No</u>			
<b>Reservoir Capacity (S5.4.2)</b>				
Shall conform to requirements (1) or (2), state units:				
(1) For reservoirs having completely separate compartments for each subsystem (two separate, independent reservoirs):				
Subsystem 1 Subsystem reservoir capacity		Each compartment (reservoir) shall have a minimum capacity equivalent to the fluid displacement resulting when all wheel cylinders or caliper pistons serviced by that independent compartment/reservoir moves from a new lining, fully retracted position to a fully worn, properly adjusted, fully applied position.  (Use Data Sheet 31 and Appendix 1A)	NA	NA
Subsystem 1 Fluid displaced from new to worn lining				
Subsystem 2 Subsystem reservoir capacity			NA	NA
Subsystem 2 Fluid displaced from new to worn lining				
2) For reservoirs utilizing a portion of the reservoir for a common supply to two or more subsystems:				
Total minimum capacity for the entire master cylinder reservoir (includes individual compartment reservoirs)	426 ml	Shall have total minimum capacity for entire reservoir for displacement resulting from all subsystem wheel cylinders or caliper positions moving from new lining to full worn condition as above.	X	
Fluid displaced from new to worn linings (ALL linings)	204.7 ml*			
*Value calculated from Data Sheet 31				

Comments: None

**DATA SHEET 30 (Part 3 of 5)**  
**TEST COMPLETION INSPECTION (S7.18)**

VEHICLE: 2005 Chrysler 300;

NHTSA NO.: C50301;

GVWR: 2225 kg

**MASTER CYLINDER RESERVOIR:**

DATE	09/20/04	Requirements	Pass	Fail
Master Cylinder Piston Displacement(S5.4.2) [If Common Reservoir Supply - continued from previous page]				
Fluid displaced by three strokes of master cylinder piston for Primary (Subsystem No. 1)	21.5 ml	Individual partial compartments of reservoir shall <b>each</b> have a minimum of fluid equal to at least the volume displaced by the master cylinder piston servicing the subsystem during a <u>full stroke</u> of the piston.  <b>NOTE:</b> Procedure uses three strokes to ensure an accurate measurement.		
Fluid displaced by three strokes of master cylinder piston for Secondary (Subsystem No. 2)	30.0 ml			
Fluid displaced per stroke, Primary	7.2 ml			
Fluid displaced per stroke, Secondary	10.0 ml			
Fluid available in partial compartment Subsystem No. 1	38.0 ml		X	
Fluid available in partial compartment Subsystem No. 2	72.0 ml		X	
<b>Brake Power Unit Reservoir (S5.4.2)</b>				
Volume displaced in charging system piston or accumulator to normal operating pressure plus wheel cylinder or caliper piston displacement.		Shall have a capacity at least equal to fluid displacement required to charge the system pistons on accumulators to normal operating pressure <u>plus</u> displacement when wheel cylinders or caliper pistons move from new lining to full worn condition as above.	NA	
<b>Reservoir Labeling (S5.4.3)</b>				
Exact copy of reservoir label: On master cylinder reservoir cap: <u>WARNING. CLEAN FILLER CAP BEFORE REMOVING.</u> On side of reservoir: <u>USE ONLY DOT 3 BRAKE FLUID FROM A SEALED CONTAINER.</u>		Label shall read: "Warning, clean filler cap before removing; use only * fluid from a sealed container". * Fluid type specified in 49 CFR 571.116	X	
Measure letter height	3.2 mm	Letters shall be at least 3.2 mm/ 0.125" high	X	
Describe label attachment method and location. <u>Embossed on the top of the master cylinder reservoir cap and on the side of the reservoir.</u>		Lettering shall be permanently affixed, engraved or embossed and located so as to be visible by direct view either on or within 100 mm/3.94 inches of the brake fluid reservoir filler plug or cap.	X	
Does the lettering contrast with the background?	<u>Yes</u>	If label is not engraved or embossed, letters shall be of a color that contrasts with the background	NA	
	<u>No</u>			

Comments: None

Technician: K. Easterday



**DATA SHEET 30 (Part 4 of 5)**  
**TEST COMPLETION INSPECTION (S7.18)**

VEHICLE: 2005 Chrysler 300; NHTSA NO.: C50301; DATE: 09/20/04  
**BRAKE SYSTEM WARNING INDICATOR (S5.5)**

CONDITION	ANSWER	REQUIREMENTS	PASS	FAIL
<b>Brake Systems Indicator Lamp Function Check (S5.5.2) (Bulb and systems check)</b>				
Describe location of brake indicator lamp: <u>In lower right quadrant of instrument cluster.</u>	NA	Shall be in front, and in clear view, of driver.	X	
Does lamp light with ignition (start) switch at ON/RUN?	Yes	Automatic activation when ignition switch is "on" when engine <b>not running</b> , or ignition between "on" and "start" if is manufacturer check position- OR -single manual action by driver	X	
Does lamp light with ignition between ON and Start?	Yes			
Brake check description in owner's manual?	Yes	Manufacturer shall explain the brake check function test procedure in the owner's manual.	X	
<b>Brake System Warning Indicator ACTIVATION (S5.5.1) DURATION (S5.5.3) FUNCTION (S5.5.4)</b>				
CONDITION	Light ON?	REQUIREMENT	PASS	FAIL
A. In event of hydraulic leak (1) On or before appearance of pressure differential of 218 psi (split system)	NA	When ignition (Start) switch is <b>ON</b> , lamp must light whenever (A), (B), (C), or (D) occurs. In addition, if service brake system is not a split system, audible warning must be activated when any condition in (A) exists. Visual warning indicator for non-split systems must be flashing.	X	
(2) If any reservoir falls below either "safe" level or 25% of capacity, whichever is greater.	Yes			
(3) On or before supply pressure to brake power unit falls to 50%	N/A			
B. Electrical functional failure in an antilock or variable brake proportioning system.	Yes		X	
C. Application of the parking brake.	Yes			
D. Brake lining wear-out if optical warning	NA			
<u>Must have Audible alarm if not split system</u> and a condition in (a) above exists?	NA			
If condition (A) (2) above does not exist, then fluid reservoir must be <b>transparent</b> for fluid check without the need for reservoir to be opened? (S5.4.4)	NA			
Indicator lamps remain activated as long as condition exists - ignition "on", and engine on or off? _____ (S5.5.3 DURATION))	Yes			
Visual warning – continuous or flashing?	Yes-Cont.			
Audible warning –continuous or flashing?	Yes-Flash*			

Comments: \*One "chime" when "Brake" warning lamp alights.  
Technician: K. Easterday

**DATA SHEET 30 (Part 5 of 5)**  
**TEST COMPLETION INSPECTION (S7.18)**

VEHICLE: 2005 Chrysler 300;

NHTSA NO.: C50301;

DATE: 08/25/04

**BRAKE SYSTEM WARNING INDICATOR LABELING (S5.5.5)**

CONDITION AND REQUIREMENT	ANSWER NOTE: Standard requires that the answer to questions be YES	PASS	FAIL
Are visual indicators legible to driver in daylight and nighttime conditions when activated?	Yes	X	
Are visual indicator words 3.2 mm (.125") high minimum? Record Height: "Brake" - <u>3.2 mm</u> ; "ABS" - <u>3.2 mm</u> .	Yes	X	
Visual indicator words and background contrasting colors, one of which is red. Record colors <u>Letters - Red, Lens - Black</u>	Yes	X	
If split system, is there one brake indicator? If yes, does it say the word "Brake"?	Yes	X	
If not split system; is there a separate indicator for loss of fluid or fluid pressure? Does this indicator say "Stop-Brake Failure"? Are the letters block and not less than 6.4 mm (.25") in height? Record letter height _____	NA		
If separate indicator for: 1. Low brake fluid per S5.5.1(a)(1), does indicator say "Brake Fluid"? NOTE: not required for mineral oil system Record wording _____ 2. Gross pressure loss per S5.5.1(a)(2), does indicator say "Brake Pressure"? Record wording _____ 3. Electrical functional failure in antilock or variable proportioning system per S5.5.1(b), letters and background contrasting colors one of which is yellow? Record colors <u>Lens - Black, Letters - Amber or yellow</u> Does indicator say "Antilock" or "ABS" or "Brake Proportioning"? Record wording <u>"ABS" within symbol.</u> 4. Parking brake per S5.5.1(c), does indicator say "Park" or "Parking Brake"? Record wording _____ 5. Brake lining wear-out per S5.5.1(d), does indicator say "Brake Wear"? Record wording <u>NA</u> 6. For any other function? If yes, Record <u>NA</u>	NA  NA  Yes  Yes  NA  NA  NA	X	

Comments: None.

Technician: K. Easterday

# DATA SHEET 31 (Part 1 of 2)

## CALCULATION OF MINIMUM RESERVOIR VOLUME REQUIREMENTS

VEHICLE: 2005 Chrysler 300;

NHTSA NO.: C50301;

DATE: 09/28/04

BRAKE		LINING		
LOCATION	TYPE	DESCRIPTION	MINIMUM THICKNESS	THICKNESS TO FULLY WORN (1) mm*
Left Front	Drum	Leading	Pre-test 12.60 mm	0 mm
		Primary	Post Test 12.22 mm	
		Inboard X	Δ 0.38 mm	
	Disc X	Trailing	Pre-test 12.57 mm	0 mm
		Secondary	Post Test 12.32 mm	
		Outboard X	Δ 0.35 mm	
LINING CLEARANCE:	Diametrical (2): N/A	Inboard – Approx. 0 mm.	Outboard – Approx. 0 mm.	
WHEEL CYLINDER DIAMETER (3): N/A		CALIPER PISTON DIAMETER (3): 60.45 mm (x1 piston)		
SHOE CAGE DIAMETER (4) <u>N/A</u> ; CENTER POINT OF BRAKE ASSY TO CENTER POINT OF W.C. <u>N/A</u>				
Right Rear	Drum	Leading	Pre-test 11.00 mm	0 mm
		Primary	Post Test 10.69 mm	
		Inboard X	Δ 0.31 mm	
	Disc X	Trailing	Pre-test 10.87 mm	0 mm
		Secondary	Post Test 10.52 mm	
		Outboard X	Δ 0.35 mm	
LINING CLEARANCE:	Diametrical (2) N/A	Inboard – Approx. 0 mm.	Outboard – Approx. 0 mm.	
WHEEL CYLINDER DIAMETER (3): N/A		CALIPER PISTON DIAMETER (3): 41.86 mm.		
SHOE CAGE DIAMETER (4): N/A		CENTER POINT OF BRAKE ASSY TO CENTER PT. OF W.C.: N/A		
CIRCUIT #1 CONSISTS OF:	LF	LR – X	RF	RR – X
CIRCUIT #2 CONSISTS OF:	LF – X	LR	RF – X	RR
(1) MFRS. RECOMMENDATIONS – N/A.				
(2) REAR - TOP OF RIVET HEADS – N/A. FRONT - 1/32 INCH – N/A. MFRS. DATA – N/A.				
(2) DRUM BRAKES, MEASURED AT HORIZONTAL CENTERLINE: N/A.				
(3) MFRS. DATA: N/A.				
(4) RESET POSITION: N/A.				

Comments: Manufacturer's data/specifications - unavailable.

For the "Thickness to Fully Worn" dimension, zero was used as the default.

Technician: K. Easterday

**DATA SHEET 31 – SECTION CONTINUED (Part 2 of 2)**Vehicle: 2005 Chrysler 300;NHTSA No.: C50301;Date: 10/19/04**Procedure and Example for Determining Master Cylinder Volume Requirement**

The procedure followed for determining the minimum volume requirements is outlined in the example shown below. The required data is taken from the previous page.

**DISC BRAKES**

Volume Required,  $V_r = (\Delta t_i + t_{ic} + \Delta t_o + t_{oc}) \times [\pi (D^2)]/4$ , where –

$V_r$  = Volume required per wheel  
 $\Delta t$  = Change in thickness (average)  
 $i$  = Inboard  
 $o$  = Outboard  
 $D$  = Caliper cylinder diameter  
 $c$  = Average clearance

Using the above equations, the volume requirements for Subsystem No. 1 (LR, RR) and Subsystem No. 2 (LF, RF) were calculated utilizing measured and manufacturer's provided data to create the greatest displacement, as shown below:

Disc Brake:  
(Front)

$$V_r = (\Delta t_i + t_{ic} + \Delta t_o + t_{oc}) \times \frac{\pi D^2}{4}$$

$$\Delta t_i = 12.60 \text{ mm}$$

$$\Delta t_o = 12.57 \text{ mm}$$

$$t_{ic} + t_{oc} = 0 \text{ mm}$$

$$D = 60.45 \text{ mm}$$

$$V_r = (12.60 + 0 + 12.57 + 0) \frac{\pi (60.45)^2}{4}$$

$$= 25.17 (2870.0)$$

$$= 72238 \text{ mm}^3 \text{ (x one piston)} = 72238 \text{ mm}^3 = 72.24 \text{ ml}$$

Disc Brake:  
(Rear)

$$V_r = (\Delta t_i + t_{ic} + \Delta t_o + t_{oc}) \times \frac{\pi D^2}{4}$$

$$\Delta t_i = 11.00 \text{ mm}$$

$$\Delta t_o = 10.87 \text{ mm}$$

$$t_{ic} + t_{oc} = 0 \text{ mm}$$

$$D = 47.86 \text{ mm}$$

$$V_r = (11.00 + 0 + 10.87 + 0) \frac{\pi (47.86)^2}{4}$$

$$= 21.87 (1376.2)$$

$$= 30098 \text{ mm}^3 \text{ (x one pistons)} = 30098 \text{ mm}^3 = 30.10 \text{ ml}$$

For System 1 (LR, RR)

$$V_{r1} = 30098 \text{ mm}^3 + 30098 \text{ mm}^3 = 60196 \text{ mm}^3$$

$$V_{r1} = 60196 \text{ mm}^3 = (60.2 \text{ ml})$$

For System 2 (LF, RF)

$$V_{r2} = 72238 \text{ mm}^3 + 72238 \text{ mm}^3 = 144476 \text{ mm}^3$$

$$V_{r2} = 144476 \text{ mm}^3 = (144.5 \text{ ml})$$

$$\text{TOTAL VOLUME REQUIRED} = V_t = V_{r1} + V_{r2} = 204672 \text{ mm}^3 = 204.7 \text{ ml}^*$$

## **SECTION 6.0**

### **Photographs**







**2005 CHRYSLER 300  
4-DOOR  
NHTSA NO. C50301  
SEPTEMBER 2004**

MFD BY DAIMLERCHRYSLER CORPORATION

DATE OF MFR: 5-04

GVWR 2225 KG  
04905 LB

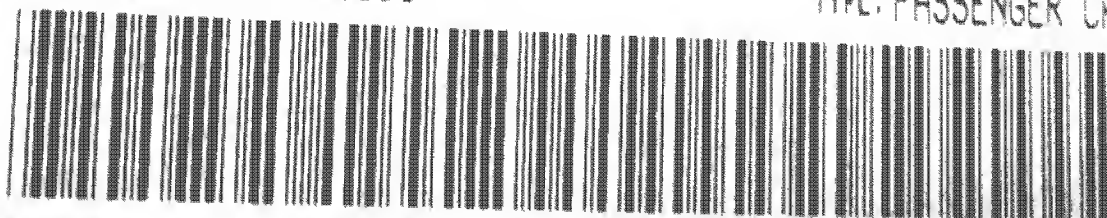
GVWR 1273 KG  
FRONT 2806 LB

GVWR 1273 KG  
REAR 2806 LB

THIS VEHICLE CONFORMS TO ALL APPLICABLE FEDERAL MOTOR VEHICLE SAFETY, BUMPER AND  
THEFT PREVENTION STANDARDS IN EFFECT ON THE DATE OF MANUFACTURE SHOWN ABOVE.

VIN: 2C3JA43R95H150151

TYPE: PASSENGER CAR

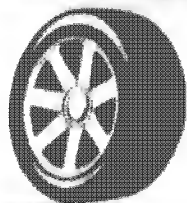


MDH: 050709 183AA PNT:PNG

VEHICLE MADE IN CANADA TRM:05DD

4648104





## TIRE AND LOADING INFORMATION

STATING CAPACITY - TOTAL 5 FRONT 2 REAR 3

THE COMBINED WEIGHT OF OCCUPANTS AND CARGO SHOULD NEVER EXCEED  
392 KG OR 865 LB

TIRE	FRONT	REAR	SPARE
ORIGINAL TIRE SIZE	P215/65R17	P215/65R17	T135/90D17
COLD TIRE INFLATION PRESSURE	210 kPa, 30 PSI	210 kPa, 30 PSI	420 kPa, 60 PSI

SEE OWNERS MANUAL FOR ADDITIONAL INFORMATION



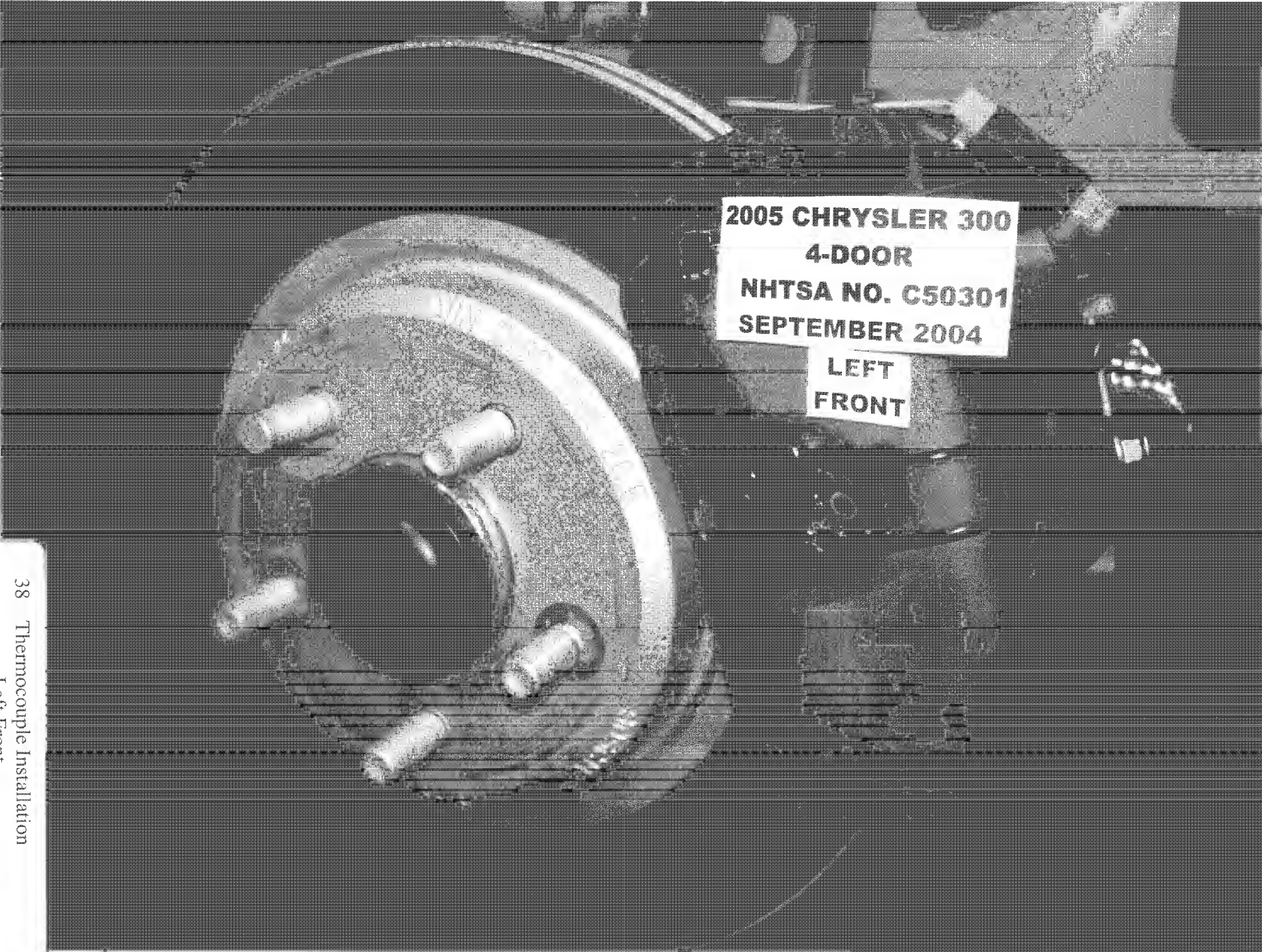
5H150151

**2005 CHRYSLER 300**

**4-DOOR**

**NHTSA NO. C50301**

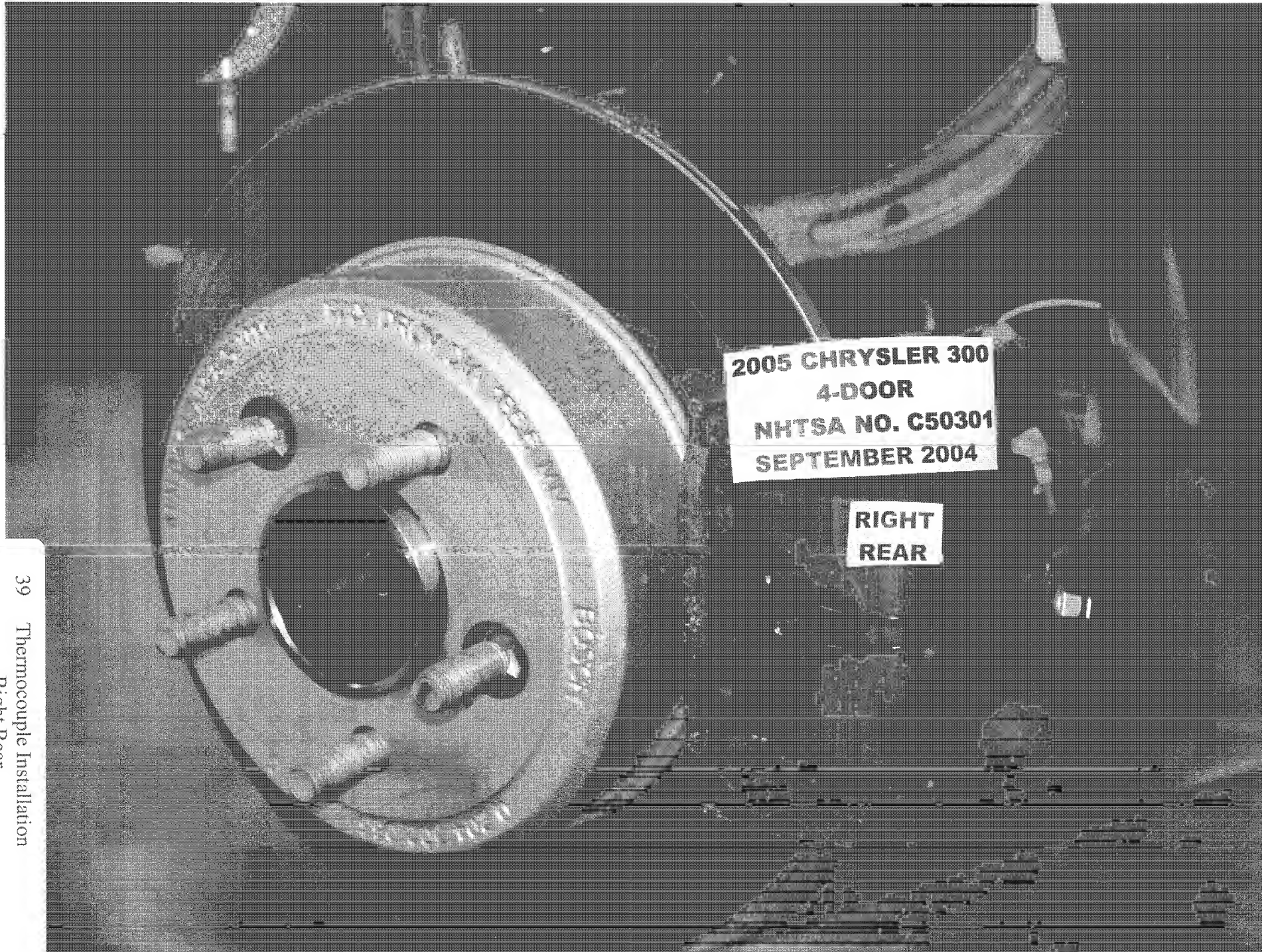
**SEPTEMBER 2004**



**2005 CHRYSLER 300  
4-DOOR  
NHTSA NO. C50301  
SEPTEMBER 2004**

**LEFT  
FRONT**





2005 CHRYSLER 300  
4-DOOR  
NHTSA NO. C50301  
SEPTEMBER 2004

RIGHT  
REAR

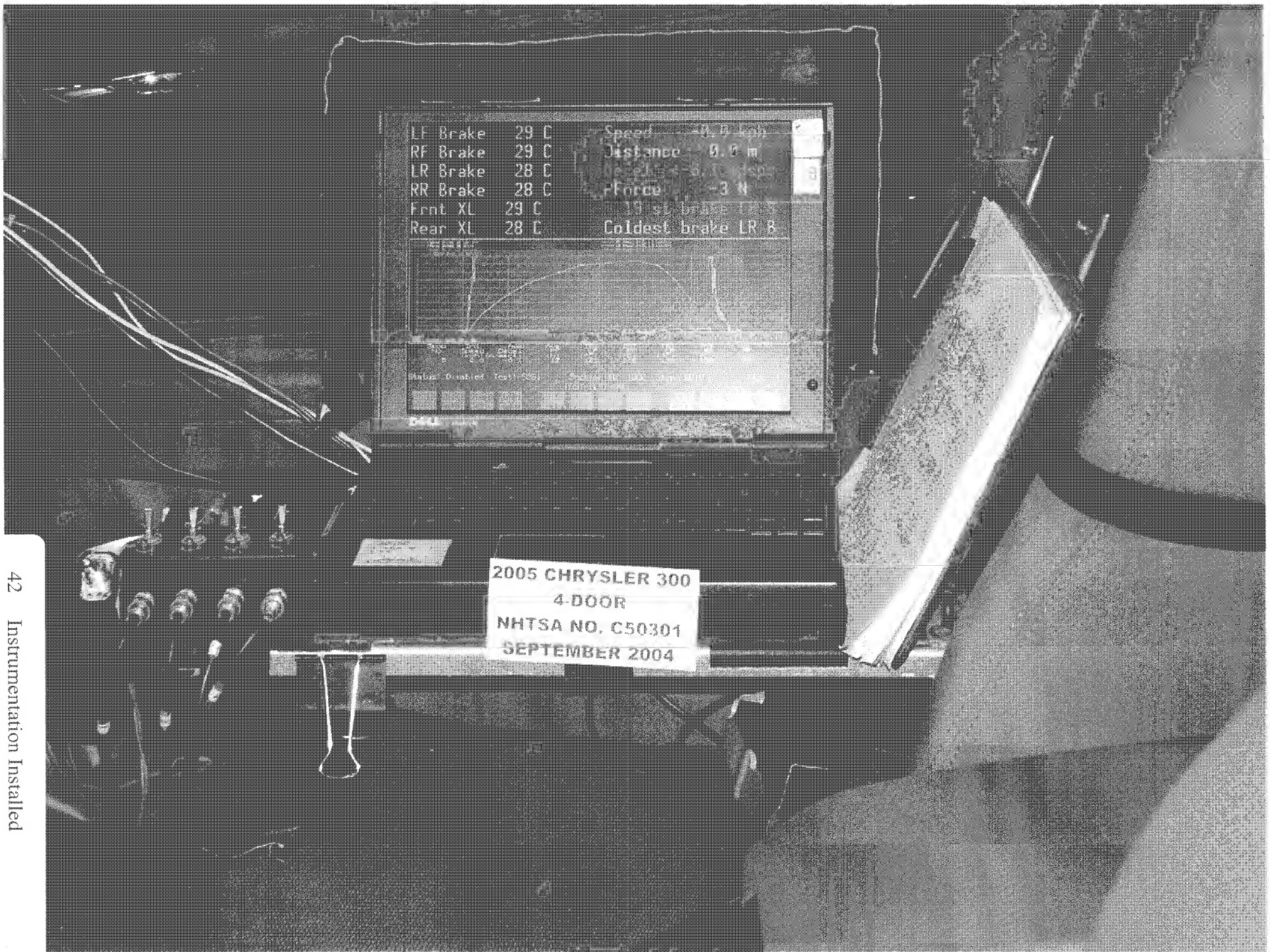






2005 CHRYSLER 300  
4-DOOR  
NHTSA NO. C50301  
SEPTEMBER 2004



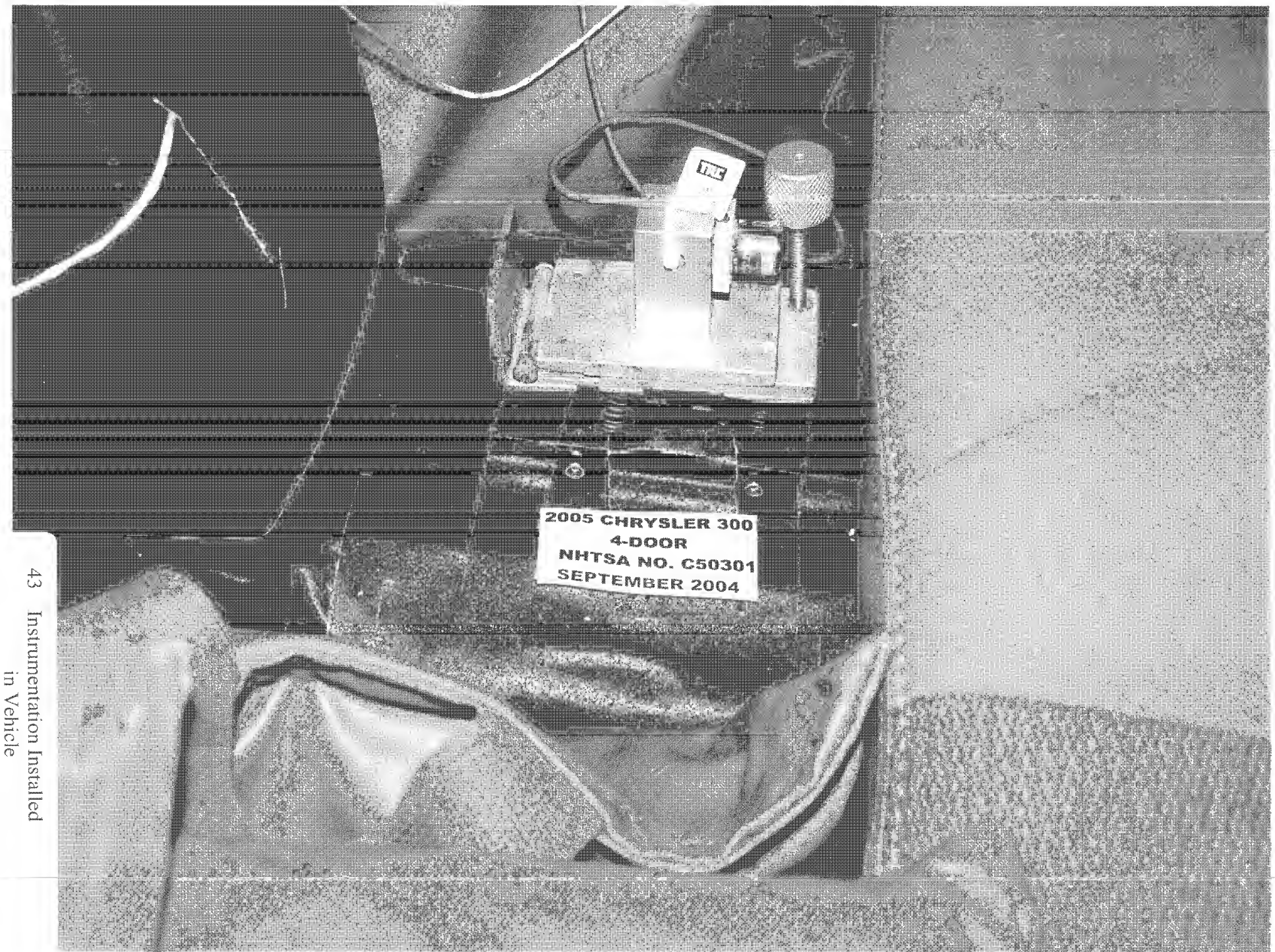


LF Brake	29 C	Speed	28.8 km/h
RF Brake	29 C	Distance	0.0 m
LR Brake	28 C	Accel	-0.7 m/s²
RR Brake	28 C	Force	-3 N
Frnt XL	29 C	1st Brake Temp	
Rear XL	28 C	Coldest brake LR 8	

2005 CHRYSLER 300  
4-DOOR  
NHTSA NO. C50301  
SEPTEMBER 2004



2005 CHRYSLER 300  
4-DOOR  
NHTSA NO. C50301  
SEPTEMBER 2004




**2005 CHRYSLER 300**  
**4-DOOR**  
**NHTSA NO. C50301**  
**SEPTEMBER 2004**



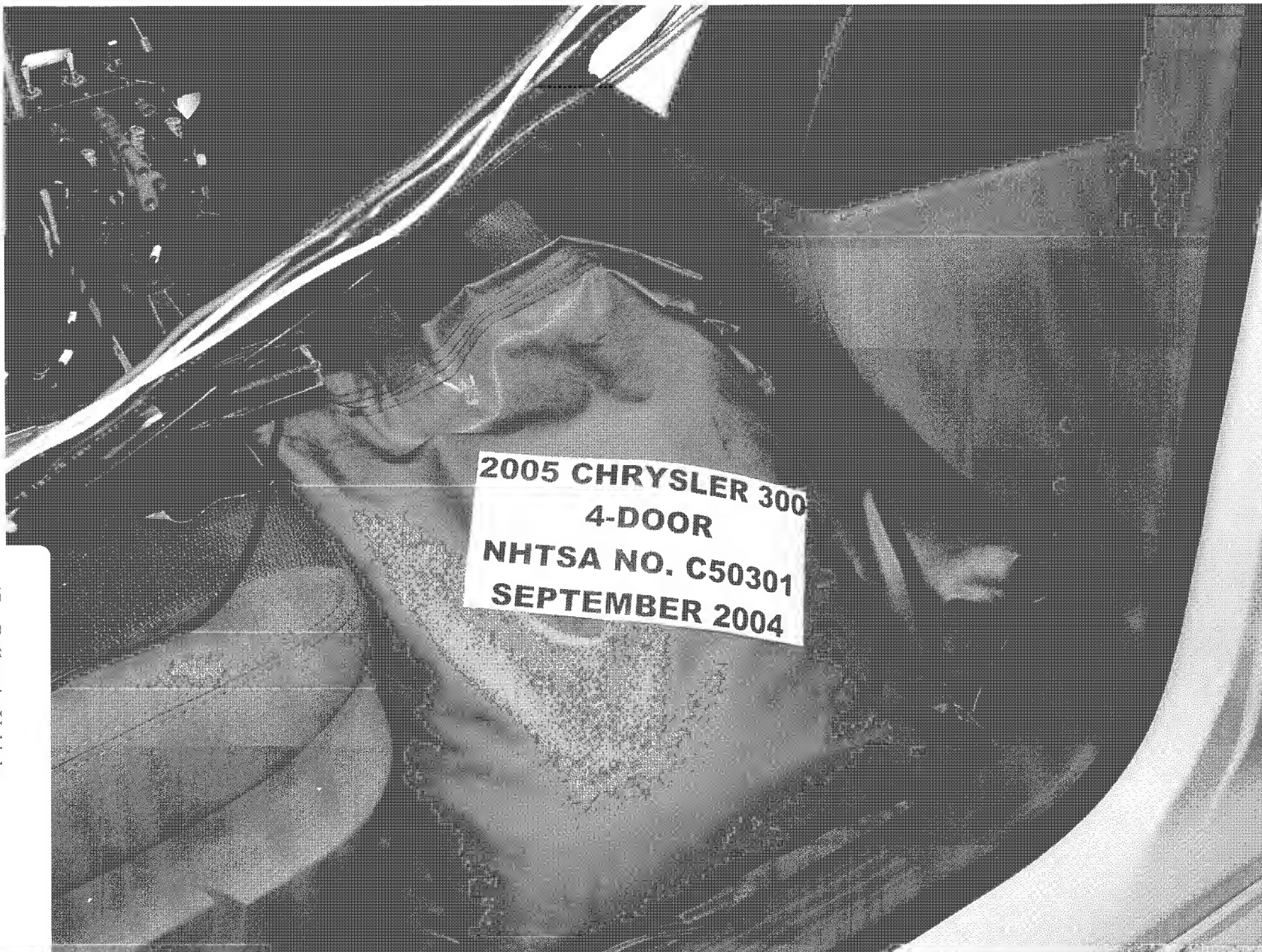


2005  
CHRYSLER  
300 4-DR.  
NHTSA NO.  
C50301  
SEPT. 2004



2005 CHRYSLER  
300 4-DOOR  
NHTSA NO. C50301  
SEPTEMBER 2004





**2005 CHRYSLER 300  
4-DOOR  
NHTSA NO. C50301  
SEPTEMBER 2004**



22  
2005 CHRYSLER 300  
4-DOOR  
NHTSA NO. C50301  
SEPTEMBER 2004





**2005 CHRYSLER 300**

**4-DOOR**

**NHTSA NO. C50301**

**SEPTEMBER 2004**

**BRAKE**



**ESP  
BAS**





**2005 CHRYSLER 300**  
**4-DOOR**  
**NHTSA NO. C50301**  
**SEPTEMBER 2004**

**2005 CHRYSLER 300**  
**4-DOOR**  
**NHTSA NO. C50301**  
**SEPTEMBER 2004**



## 7.0 INSTRUMENT CALIBRATION (12 MONTH MAXIMUM INTERVAL)

VEHICLE: 2005 Chrysler 300; NHTSA NO.: C50301; DATE: 09/06/04

INSTRUMENT	SERIAL NUMBER	CALIBRATION DATE	NEXT CALIBRATION
Data Acquisition System - Link DAS 2030	975016	10/23/03	10/23/04
Computer – Dell Latitude/Link Engrg.	TRC-43207	Not Applicable	Not Applicable
Software - Link Engrg. Rev Data	TRC Propr.	NA	NA
LF Torque Wheel	Not Utilized		
RF Torque Wheel	Not Utilized		
LR Torque Wheel	Not Utilized		
RR Torque Wheel	Not Utilized		
Stopwatch – Accusplit	SW ST03	07/16/04	07/16/05
Tire Pressure Gauge – Ashcroft	AG-05	11/25/03	11/25/04
Voltage Multimeter – Dana 4300	M-108639	11/25/03	11/25/04
Pedal Force Transducer – Sensor Devel.	LC-169755	Each Test	Each Test
Asst. Pipe-Handle Steel Weights - Ohaus	LB-0002	06/22/04	06/22/05
Park Brake Force Transducer – Interface	41721	Each Test	Each Test
LF Hydraulic Pressure Transducer	Not Utilized		
RF Hydraulic Pressure Transducer	Not Utilized		
LR Hydraulic Pressure Transducer	Not Utilized		
RR Hydraulic Pressure Transducer	Not Utilized		
Accelerometer - Setra (+ or – 15 g) 141A	A-1055763	Each Test	Each Test
Fifth Wheel – ADAT DSR-06 Radar	140.0119	Each Test	Each Test
Wind Velocity/Direct. – Davis Model 6410	WXB308193A	09/15/03	09/15/04
Ambient Temp. Gage – Davis Model 6320	WXB308193A	09/15/03	09/15/04
LF Brake Thermocouple - Temprel/Link	T52-0B-24K	Ea. Test w/Link	Ea. Test w/Link
RF Brake Thermocouple - Temprel/Link	T52-0B-24K	Ea. Test w/Link	Ea. Test w/Link
LR Brake Thermocouple - Temprel/Link	T52-0B-24K	Ea. Test w/Link	Ea. Test w/Link
RR Brake Thermocouple - Temprel/Link	T52-0B-24K	Ea. Test w/Link	Ea. Test w/Link
Lock-up Detection System	TRC Propr.	Each Test	Each Test
Vehicle Weight – Toledo/Mettler Scales JAGXTREME 3000000, (Bldg. 70)	SN 5225831- 5JC	08/06/04	11/06/04

QUALITY ASSURANCE 

# **DAILY CALIBRATIONS (1 of 3)**

Vehicle: 2005 Chrysler 300

NHTSA No.: C50301

## **Deceleration Calibration Data for Unit 5351**

Desired full scale value is: 9.81 m/s/s

Allowed deviation is: + or - 0.15 m/s/s

Accelerometer      Level to zero, then tilt to  
full scale

"Date"	"Time"	Zero	Cal
"stp"	"stp"	"Decel"	"Decel"
9/7/2004	15:28:23	0.04	9.75
9/10/2004	11:51:01	0.05	9.98
9/13/2004	9:12:32	-0.02	9.80
9/13/2004	15:32:17	0.01	9.57
9/14/2004	8:29:45	-0.03	9.91
9/14/2004	15:30:18	0.02	9.74
9/15/2004	8:31:55	0.14	9.76
9/15/2004	15:40:43	0.04	9.82
9/16/2004	8:45:23	0.01	9.80
9/16/2004	10:59:03	0.02	9.76
9/20/2004	8:43:50	0.02	9.78

PRE-TEST CAL.

POST-TEST CAL.

## **Pre-Test Linearity Check 09/07/04**

Actual (m/s/s)	Rec. (m/s/s)
0.0	0.0
3.0	3.0
6.1	6.1
9.8	9.8

## **Post-Test Linearity Check 09/16/04**

Actual (m/s/s)	Rec. (m/s/s)
0.0	0.0
3.0	3.0
6.1	6.1
9.8	9.8

## **Distance Calibration Data for Unit 5351**

Desired full scale value is: 1000 m

Allowed deviation is: 3 m

Light beam      Drive from 0 to 100 to 0 km/h  
distance sensor      on a measured kilometer

"Date"	"Time"	Distance for
"stp"	"stp"	1000 meters
9/10/2004	11:41:36	999.3
9/13/2004	9:23:09	1001.2
9/13/2004	15:35:39	1001.0
9/14/2004	8:35:06	1001.5
9/14/2004	15:37:00	999.6
9/15/2004	8:40:49	1002.6
9/15/2004	15:45:21	1001.1
9/16/2004	9:11:35	1002.3
9/16/2004	11:06:57	1001.6

PRE-TEST CAL.

POST-TEST CAL.

# DAILY CALIBRATIONS CONTINUED (2 of 3)

VEHICLE: 2005 Chrysler 300

NHTSA No.: C50301

## Wheel Tachometer Calibrations for Unit 5351

Wheel tachometer calibrations: all wheel speeds should be 15 km/h

Wheel tachometer calibrations: all wheel speeds should be 15 km/h												
		"Date"	"Time"	Zero	@15km/h	Zero	@15km/h	Zero	@15km/h	Zero	@15km/h	
		stp	stp	LF	LF	RF	RF	LR	LR	RR	RR	
Wheel lock detector	While at a standstill, check zeros. Drive vehicle at approx. 15 km/h and engage zero speed switch for each wheel	9/13/2004	9:24:58	-0.1	16.1	-0.1	16.3	0.0	20.9	0.0	16.8	PRE-TEST CAL.
		9/13/2004	15:33:24	-0.1	15.7	0.0	16.1	0.0	16.4	-0.1	16.3	
		9/14/2004	8:33:43	-0.1	16.2	0.0	16.2	-0.1	19.4	0.0	16.7	
		9/14/2004	15:33:06	0.0	15.5	-0.1	15.6	-0.1	17.9	-0.1	15.8	
		9/15/2004	8:36:33	-0.1	15.8	0.0	16.2	0.0	17.9	0.0	16.7	POST-TEST CAL.
		9/15/2004	15:42:15	-0.1	18.8	-0.1	18.6	0.0	21.8	0.0	19.0	
		9/16/2004	9:07:09	0.0	15.5	0.0	15.8	0.0	16.1	0.0	16.8	
		9/16/2004	11:01:57	-0.1	16.5	0.0	16.5	-0.1	19.5	0.0	17.4	

When driven over 15 km/hr and the wheel tach generators are shunted to zero volts, does the graphical screen indicate wheel lock at each wheel position?: ☒ Yes, ☐ No.

Note: The wheel tach calibrations did not occur until after the Burnish was complete.

## Pedal Force Meter Calibration for Unit 5351

Target shunt calibration is 391 N

Desired recorded value is: 391 N

Desired recorded calibration value is: 500 N

Allowed deviation is: 6.5 N

Allowed deviation is: 0.5%

"Date"	"Time"	Zero	Cal Val			
stp	stp	Force	Force lb			
Service brk. pedal effort	Driver engages a fixed shunt cal switch.	9/10/2004	9:07:58	-0.4	499.4	PRE-TEST CAL.
		9/10/2004	11:51:38	-0.6	392.0	
		9/13/2004	9:07:15	-0.9	391.8	
		9/13/2004	15:31:38	-0.1	391.7	
		9/14/2004	8:28:47	-0.5	391.5	POST-TEST CAL.
		9/14/2004	15:31:33	-0.5	391.9	
		9/15/2004	8:32:19	-0.2	392.0	
		9/15/2004	15:40:00	-0.2	391.7	
		9/16/2004	8:46:01	-0.3	391.8	
		9/16/2004	11:00:31	-0.3	391.6	
9/20/2004	8:41:18	-1.0	499.7			

## Pre-Test Linearity Check - 09/07/04

Actual	Recorded
Force (N)	Force (N)
0	0
222	223
445	445
498	498

## Post-Test Linearity Check - 09/16/04

Actual	Recorded
Force (N)	Force (N)
0	0
222	222
445	446
498	499

# **DAILY CALIBRATIONS CONTINUED (3 of 3)**

VEHICLE: 2005 Chrysler 300

NHTSA No. C50301

Dynamic Speed Calibration for Unit 5351

Desired speed value is: 100 km/h

Allowed deviation is: 1.6 km/h

Desired time value is: 36 seconds

Allowed deviation is: + or - 0.6 seconds

Light beam  
speed sensor

Drive vehicle  
at a steady  
100 km/h  
through a  
kilometer.

"Date"	"Time"	"Speed"	"Time"
stp	stp	km/h	sec
9/10/2004	11:44:49	99.6	36.22
9/13/2004	9:20:41	100.5	36.17
9/13/2004	15:34:25	101.3	35.92
9/14/2004	8:32:15	100.1	36.23
9/14/2004	15:35:03	100.2	36.05
9/15/2004	8:38:51	100.7	36.07
9/15/2004	15:42:59	100.3	36.11
9/16/2004	9:09:22	100.3	36.26
9/16/2004	11:04:40	100.4	35.98

PRE-TEST CAL

POST-TEST CAL

## APPENDIX A

Copy of Manufacturer's Sticker

# 2005 MODEL YEAR CHRYSLER



# 300

## PRICE INFORMATION

MANUFACTURER'S SUGGESTED RETAIL PRICE OF  
THIS MODEL INCLUDING DEALER PREPARATION

**Base Price: \$22,970**

### CHRYSLER 300 RWD

Exterior Color: Cool Vanilla Clear Coat Paint

Interior Color: Dk/Md Slate Gray

Interior: Premium Cloth Low-Back Bucket Seats

Engine: 2.7L V6 DOHC 24V Engine

Transmission: 4-Speed Automatic Transaxle

**STANDARD EQUIPMENT** (UNLESS REPLACED BY OPTIONAL EQUIPMENT)

### FUNCTIONAL / SAFETY FEATURES

Child Seat Upper Tether Anchorages  
Front Next Generation Multistage Air Bags\*\*  
Occupant Classification System  
4-Wheel Disc Brakes  
Power Rack-and-Pinion Steering  
4-Wheel Independent Ride Suspension  
725-Ampere Maintenance-Free Battery  
140-Ampere Alternator  
Antenna Integrated in Rear Window  
Front and Rear Solar-Control Glass  
Rear Window Defroster  
Variable Intermittent Windshield Wipers  
Height-Adjustable Front Seat Belts  
3-Point Rear Center Seat Belt  
Rear Door Child-Protection Locks  
Inside Emergency Trunklid Release

### INTERIOR FEATURES

Air Conditioning  
Power Accessory Delay  
Tilt/Telescope Steering Column  
Power Windows with Driver's One-Touch-Down Feature  
Cell Phone Storage  
Speed-Sensitive Power Locks  
Sentry Key(R) Engine Immobilizer Theft-Deterrent  
Speed Control  
Power Driver's Seat  
AM/FM Stereo with CD Player  
4 Speakers  
Remote Keyless Entry  
Illuminated Entry  
Full-Length Floor Console

## PRICE INFORMATION (cont'd)

Front Reading/Map Lamps  
Rear Reading/Courtesy Lamps  
Front and Rear Floor Mats  
Power Trunklid Release  
Front and Rear Climate-Control Outlets  
12-Volt Power Outlet

### EXTERIOR FEATURES

Power Mirrors  
Solar-Control Glass  
P215/65R17 98T BSW All Season Tires  
17-Inch Bolt-On Wheel Covers

### OPTIONAL EQUIPMENT

Electronic Stability Program \$1,025  
Emergency Brake Assist  
All-Speed Traction Control  
Antilock 4-Wheel Disc Brakes  
AM/FM Stereo w/In-Dash 6-Disc CD/MP3 \$300

### DESTINATION CHARGE

\$625

**TOTAL PRICE: \* \$24,920**

\*\* Certified to the federal regulations for automatic  
passenger occupant classification.

### WARRANTY COVERAGE

7-year or 70,000-mile Powertrain Limited Warranty+  
Towing assistance during Warranty period++  
3-year or 36,000-mile Basic Limited Warranty

For more information visit: [www.chrysler.com](http://www.chrysler.com)  
or call 1-800-CHRYSLER

**DaimlerChrysler  
Motors Company LLC**

THIS VEHICLE IS MANUFACTURED TO MEET SPECIFIC UNITED STATES REQUIREMENTS. THIS VEHICLE IS  
NOT MANUFACTURED FOR SALE OR REGISTRATION OUTSIDE OF THE UNITED STATES.

## PARTS CONTENT INFORMATION

FOR VEHICLES IN THIS CARLINE:

U.S./CANADIAN PARTS CONTENT: 71 %

NOTE: PARTS CONTENT DOES NOT INCLUDE FINAL ASSEMBLY,  
DISTRIBUTION, OR OTHER NON-PARTS COSTS.

FOR THIS VEHICLE:

FINAL ASSEMBLY POINT:

BRAMPTON, ONTARIO, CANADA

COUNTRY OF ORIGIN:

ENGINE: UNITED STATES

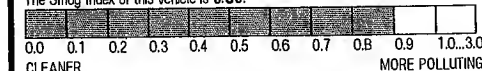
TRANSMISSION: UNITED STATES

### Bumper Performance

This vehicle is equipped with bumper systems that can withstand a frontal  
barrier impact speed of 2.5 miles per hour and a rear barrier impact speed of  
2.5 miles per hour with no more damage than allowed by the Federal bumper  
standard. The Federal bumper standard allows damage to the bumpers and  
attaching hardware and specifies barrier tests to be conducted at 2.5 miles  
per hour.

### Smog Index:

The Smog Index of this vehicle is 0.80.



The Smog Index of the average new vehicle is 0.80

The Smog Index (SI) indicates the relative level of smog-forming pollutants  
emitted by the vehicle. The lower the SI, the lower the vehicle's emissions.



Ask Your Dealer About A DaimlerChrysler  
Service Contract On This Vehicle  
Or Call 1-800-442-2666.



Ask dealer for a copy of the limited warranties.

+A deductible applies to the 7-year 70,000-mile  
powertrain limited warranty. 7/70 Transferable to  
second owner with fee. Excludes normal maintenance  
and wear items.

++ Towing assistance administered by Cross Country  
Motor Club Inc., Boston, MA 02155. You must call  
(800) 521-2779 for prior authorization to receive  
these benefits.

Compare this vehicle to others in the FREE FUEL ECONOMY GUIDE available at the dealer.

CITY MPG

**21**



HIGHWAY MPG

**28**

Actual Mileage will vary with  
options, driving conditions,  
driving habits and vehicle's  
condition. Results reported to  
EPA indicate that the majority  
of vehicles with these estimates  
will achieve between  
17 and 25 mpg in the city,  
and between  
23 and 33 mpg on the  
highway.

2005 300  
6 CYL, 2.7 L (165 CID).  
MULTIPOINT FUEL INJECTION.  
4-SPEED AUTOMATIC TRANS. W/  
LOCKUP TORQUE CONVERTER

**Estimated Annual Fuel Cost:**  
\$ 876

A range of fuel economy values  
for other vehicles classified as  
**LARGE CARS**  
is not available at this time.

See [www.fueleconomy.gov](http://www.fueleconomy.gov)

Assembly Point/Port of Entry: BRAMPTON, ONTARIO, CANADA

VIN 2C3-JA43R95H-150151

LA-VIN 9597

0515

SHIP TO: 67643 36  
JEFF WYLER CHRYSLER-JEEP  
1117 STATE ROUTE 32  
BATAVIA OH 45103-0327

SOLD TO: 42 67643  
JEFF WYLER CHRYSLER-JEEP  
1117 STATE ROUTE 32  
BATAVIA OH 45103-0327

THIS LABEL IS ADDED TO THIS VEHICLE TO COMPLY WITH FEDERAL LAW. THE LABEL CANNOT BE REMOVED  
OR ALTERED PRIOR TO DELIVERY TO THE ULTIMATE PURCHASER.

\* STATE AND/OR LOCAL TAXES IF ANY, LICENSE AND TITLE FEES AND DEALER SUPPLIED AND  
INSTALLED OPTIONS AND ACCESSORIES ARE NOT INCLUDED IN THIS PRICE. DISCOUNT, IF ANY,  
IS BASED ON PRICE OF OPTIONS IF PURCHASED SEPARATELY.



## APPENDIX B

### Discussion on Data

## DISCUSSION ON DATA

### Symbols for Brake Components

4	-	4 Wheel	G	-	Groan	DL	-	Deceleration (State FPSPS)
X	-	Skid	SQ	-	Squeal	PF	-	Pedal on Floor
L	-	Left	SQK	-	Squeak	SCP	-	Shoe Scrape
R	-	Right	PO	-	Pinchout	RB	-	Rubber Banding
R	-	Rear	P	-	Pull	O	-	Odor
F	-	Front	R	-	Shudder	NOX	-	No Skid
B	-	Both	M	-	Momentary			

INT or INIT	-	Initial Part of Stop
MID	-	Middle of Stop
END	-	End of Stop

All stops were made manually.



## APPENDIX C

### Contractor's Comments Procedure Modifications and Test Facility

Comments for vehicle C50301.

For all recorded decelerations:

The recorded *average* deceleration values for the tests are slightly lower than that which is required or targeted for certain test sections. However, in all cases and in reality, the driver maintained the correct required/target deceleration values for the majority of time for each of those stops. The recorded deceleration is acquired from the moment the service brake pedal is moved until the vehicle reaches zero speed. Therefore, the time needed to achieve the target deceleration (rise time) and the time the vehicle goes from the target deceleration to zero (fall time) is included in the average deceleration calculation. The rise and fall times were added to the entire length of the stops. Hence the recorded average deceleration values were generally and slightly less than the required/target deceleration values.

For Data Sheets 16 & 22 – Antilock Functional Failure at LLVW and GVWR, respectively, the ABS and the Electronic Brake Distribution (EBD) - Variable Proportioning - are integral. Failing the ABS also fails the EBD. The EBD cannot be failed separately. Therefore, Data Sheets 17 and 23 are not included.

For Data Sheets 20 and 21, the Hydraulic Circuit Failures, the tests were performed in the following order: Data Sheet 21 and 20. This was due to the difficult accessibility of accessing the master cylinder output ports.

### 7.5-MILE TEST TRACK

The 7.5-mile test track encloses a 1,600-acre area, one mile wide and 3.5 miles long.

The track has a downward grade, north to south, of 0.228 percent and a cross slope in the straightaways of 3/16 inch per foot. The 1.88 mile long straightaways flow into transition areas 2,300 feet in length and then into 5,275-foot long curves with a constant radius of 2,400 feet. The 36-foot wide straightaways and the 42-foot wide curves provide three test lanes. Paved berms, 12 feet in width, border the straightaways and the inside of the curves.

As a vehicle moves toward the outside of the track in the curves, it encounters a progressively steeper bank. The inside lane (or "slow" lane) has a bank of 10 degrees allowing a neutral speed of 80 mph with no side forces. In the center lane, the slope increases to 19 degrees resulting in a neutral speed of 110 mph. The outside lane's 28-degree bank allows a 140 mph neutral speed. Rimming the outer lane is a seven-foot safety lane culminating in a 36-degree slope at the guardrail.

The facility is paved with Portland cement concrete. It carries a maximum single axle load of 36,000 pounds and a maximum tandem axle load weight of 48,000 pounds. Special provisions can be made for heavier weight loads.

With 22.5 lane miles, our track will accommodate many vehicles simultaneously. Research which utilizes the track includes component performance and durability studies, brake tests, aerodynamic studies, fuel economy studies, drive line efficiency tests, and the determination of vehicular acceleration and cruise characteristics. In addition, it supports maximum speed determination, road load power, noise and emission measurements and tire durability test programs.

The 7.5-mile test track can be used in conjunction with other facilities at TRC. It provides an excellent area for pre-test conditioning of equipment such as brake burnishing, tire break-in, and vehicle warm-up.

## TRC SKID PAD

The Skid Pad is a test facility which is utilized primarily for the evaluation of tire and brake systems.

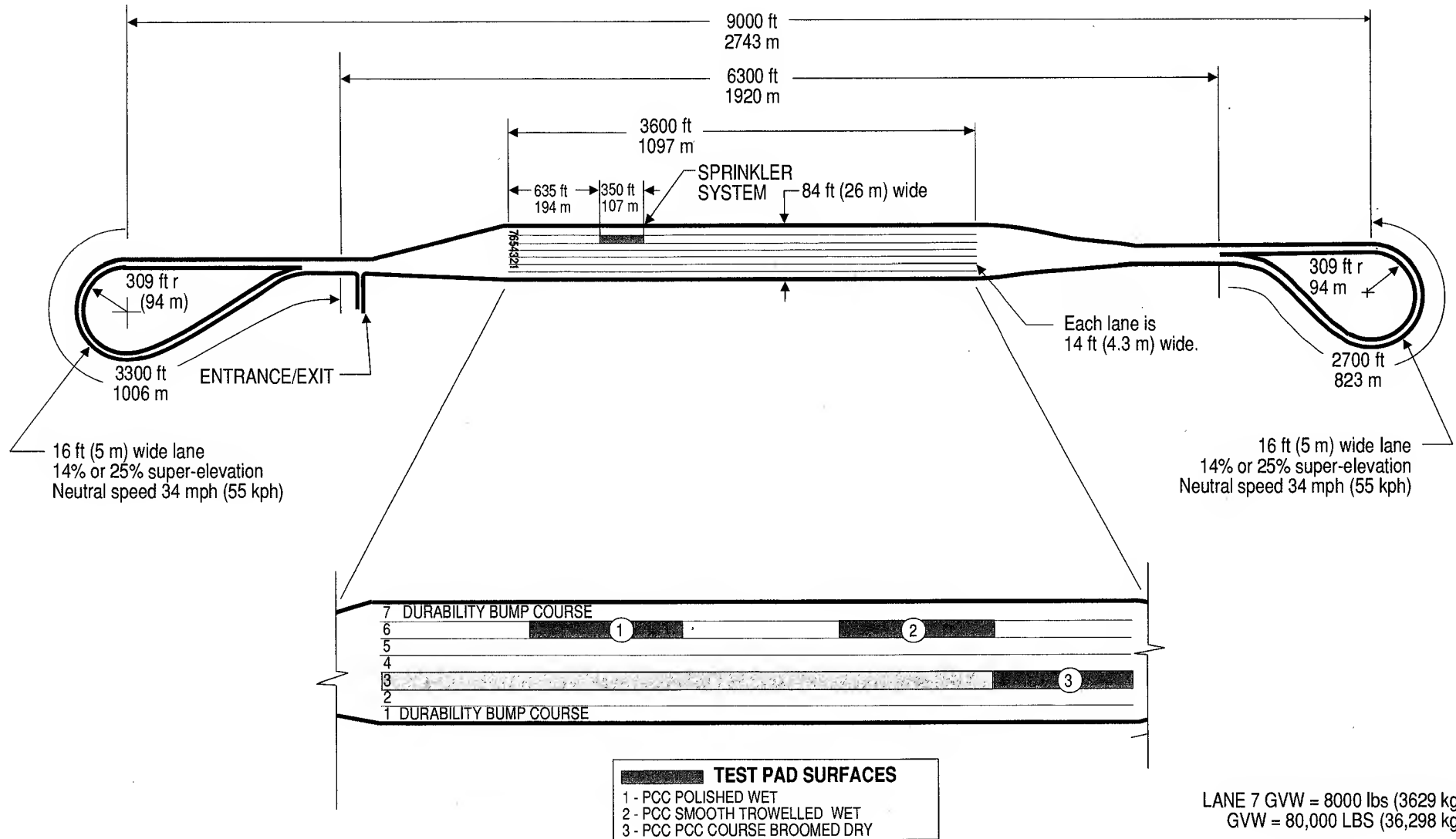
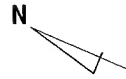
The overall dimensions of the pad are 9,000 feet by 84 feet with loops on the north and south ends. Both turnaround loops have a 309-foot radius and are 16 feet wide with a 25 percent super elevation. They will accommodate speeds of 45 mph with zero side force and 60 mph with .5 g's lateral acceleration. The acceleration/deceleration lanes at each end are 3,280 feet in length.

A test area of 210,000 square feet is situated in the center of the skid pad containing several test pads with varying surface textures. Skid numbers in this area range from 30 (wet) to 80 (dry).

The skid pad is paved with Portland cement. The load capacity of the skid pad is 36,000 pounds maximum single axle weight and 48,000 pounds maximum tandem axle weight.

Varying surface textures in the main test area are ideal for testing tire and/or brake system performance on different surfaces as characterized by "skid numbers." The skid pad is also used for acceleration studies, aerodynamics, rolling resistance, noise testing, and vehicle top speed determination.

ALL CONCRETE BROOMED SURFACE  
1 LAP = APPROXIMATELY 4 MILES (6.4 KILOMETERS)



NOTE: BUMP COURSES PARALLEL THE PERIMETERS OF LANES 1 AND 7.

Not to scale  
All dimensions are approximate

SKID PAD



TRANSPORTATION RESEARCH CENTER INC.  
EAST LIBERTY, OHIO 43319-0367

F-13 0699

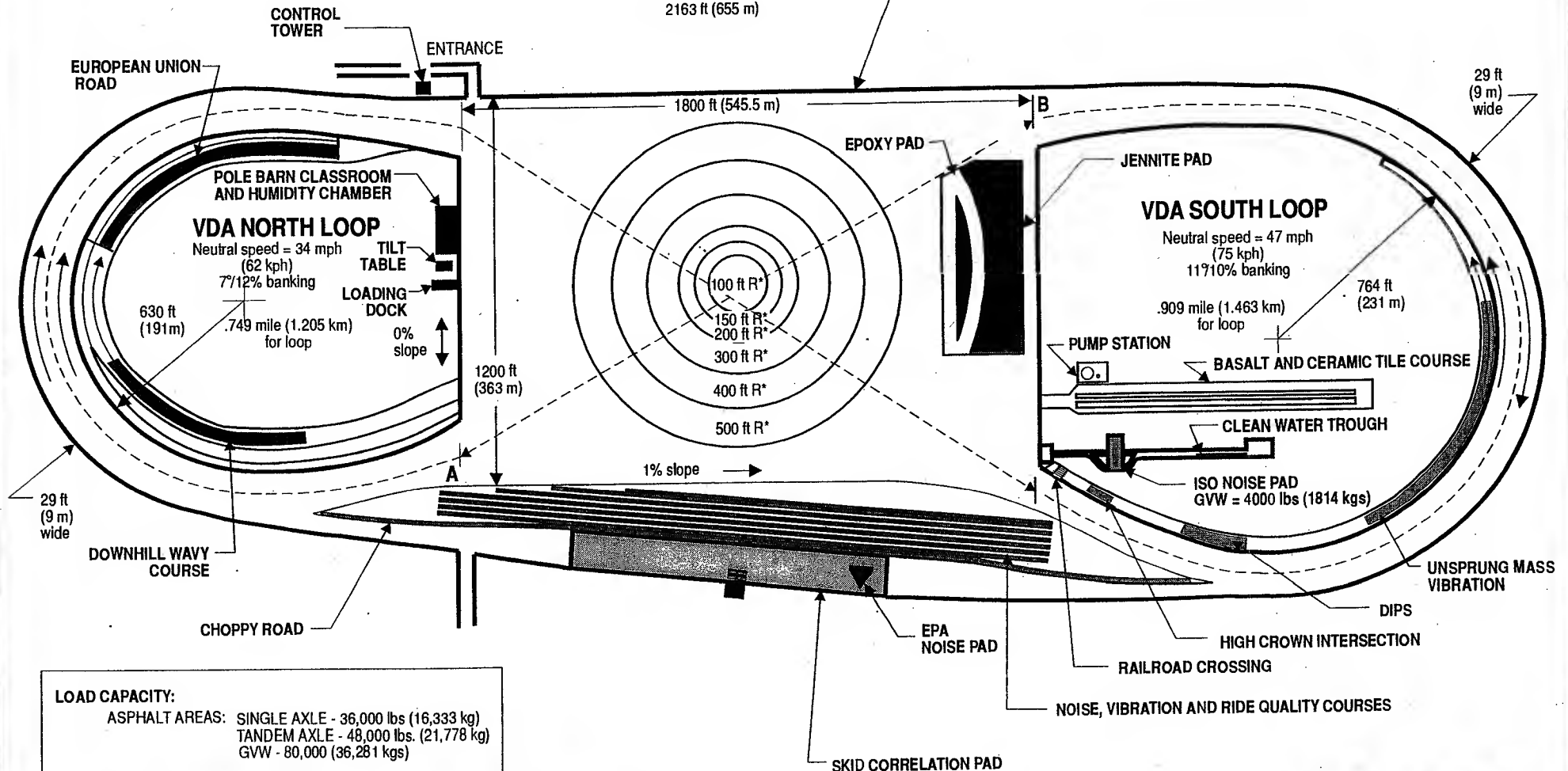
# VEHICLE DYNAMICS AREA

50 ACRES (200,000 sq. m.) OF  
ASPHALTIC CONCRETE AND  
LOOPS SURROUNDED BY 8 ft.  
(2.5 m) HIGH PRIVACY FENCE.

\*NOTE  
METRIC CONVERSIONS OF  
RADIANT CIRCLES ARE:

100 ft = 30 m  
200 ft = 61 m  
300 ft = 91 m  
400 ft = 122 m  
500 ft = 152 m

DISTANCE ACROSS VDA FROM "A" TO "B"  
2163 ft (655 m)



## LOAD CAPACITY:

ASPHALT AREAS: SINGLE AXLE - 36,000 lbs (16,333 kg)  
TANDEM AXLE - 48,000 lbs (21,778 kg)  
GVW - 80,000 (36,281 kgs)

OTHER COURSES: Limits Apply

Not to scale  
All dimensions are approximate

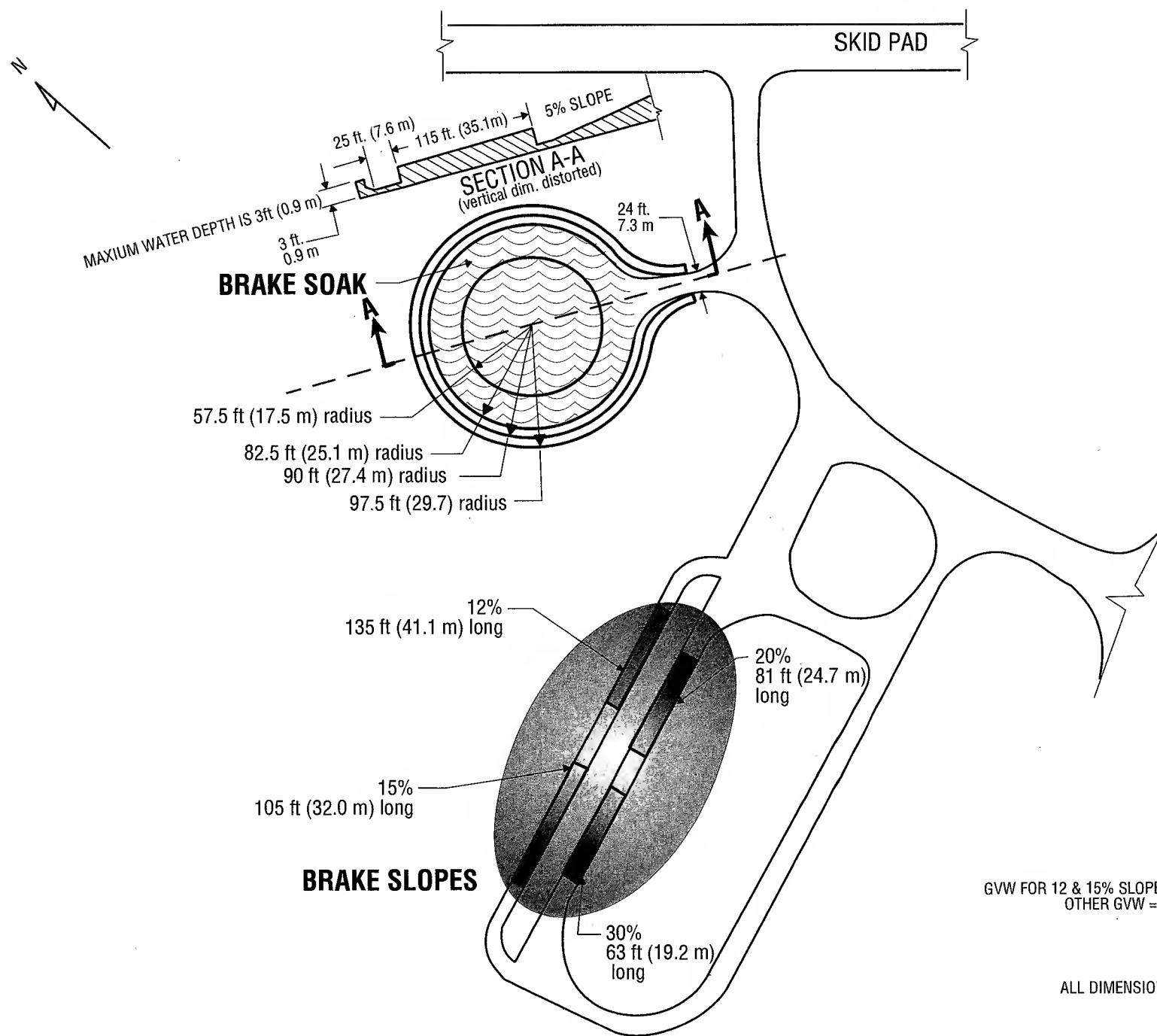
VEHICLE DYNAMICS AREA



TRANSPORTATION RESEARCH CENTER INC.

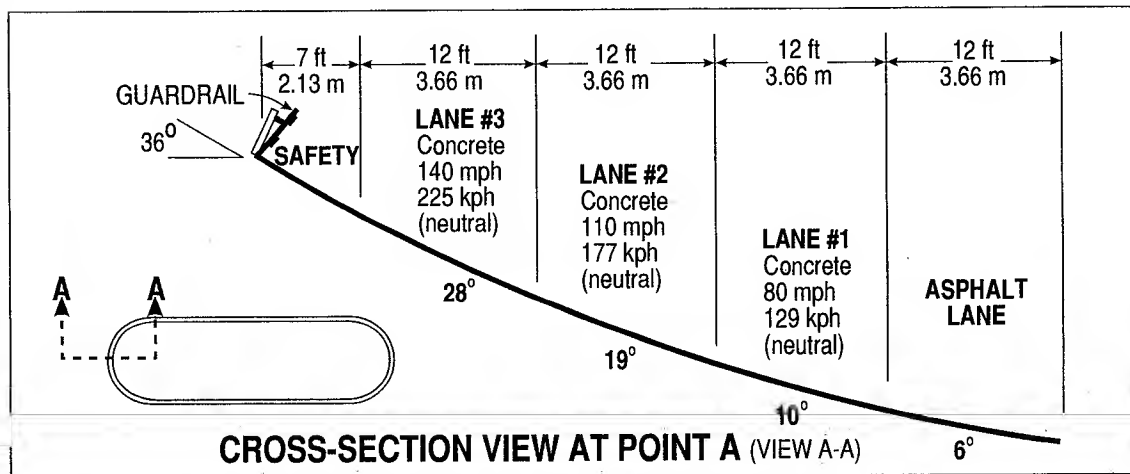
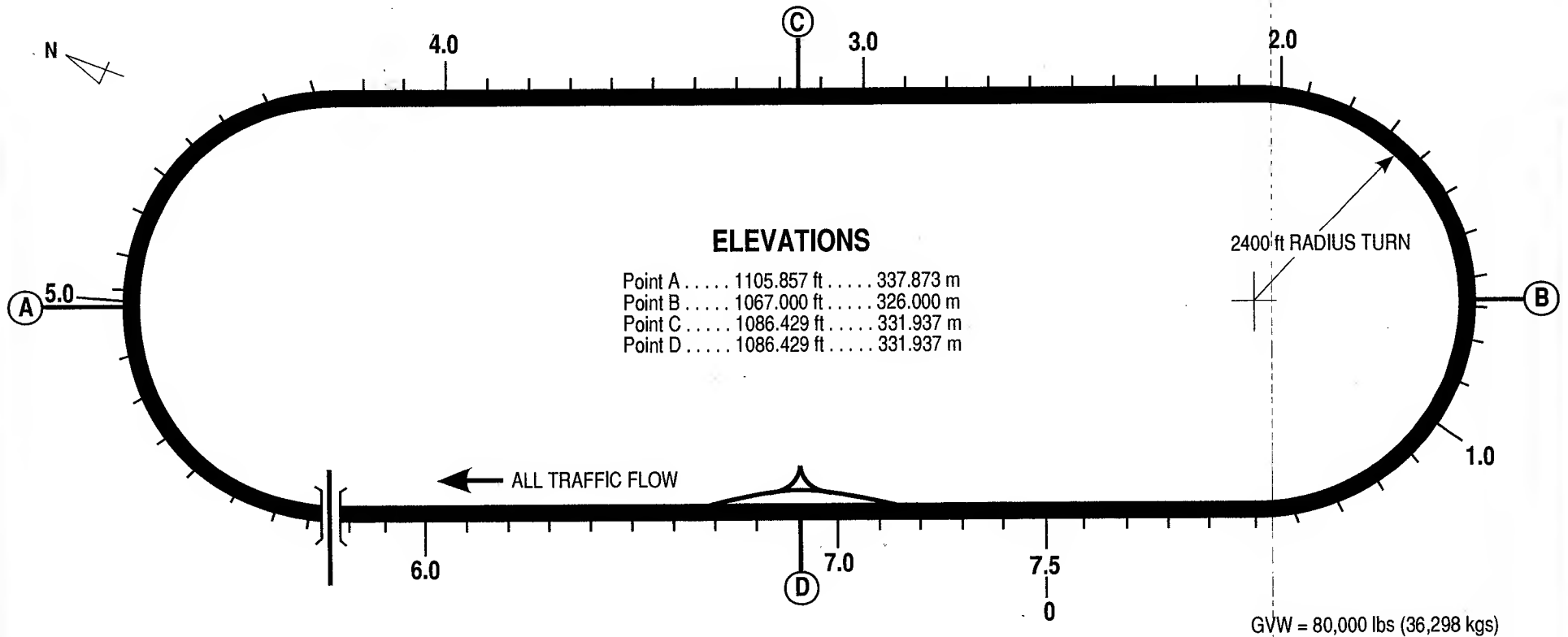
EAST LIBERTY, OHIO 43319-0367

F-14 0300



GVW FOR 12 & 15% SLOPE = 4000 lbs (1814 kgs)  
OTHER GVW = 80,000 lbs (36,296 kg)

NOT TO SCALE  
ALL DIMENSIONS ARE APPROXIMATE



DISTANCES	
Lane 3	7.539 mi ..... 12.133 km
Lane 2	7.521 mi ..... 12.104 km
Lane 1	7.507 mi ..... 12.081 km
Point A to Point B	3.333 mi ..... 5.364 km
Point C to Point D	.947 mi ..... 1.524 km

NOT TO SCALE

7.5-MILE TEST TRACK



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F-10 0498



APPENDIX D  
Notice of Possible Non-Compliance

This vehicle (C50301) met the requirements of the FMVSS 135 standard.